S00 P1060

FIG. 1

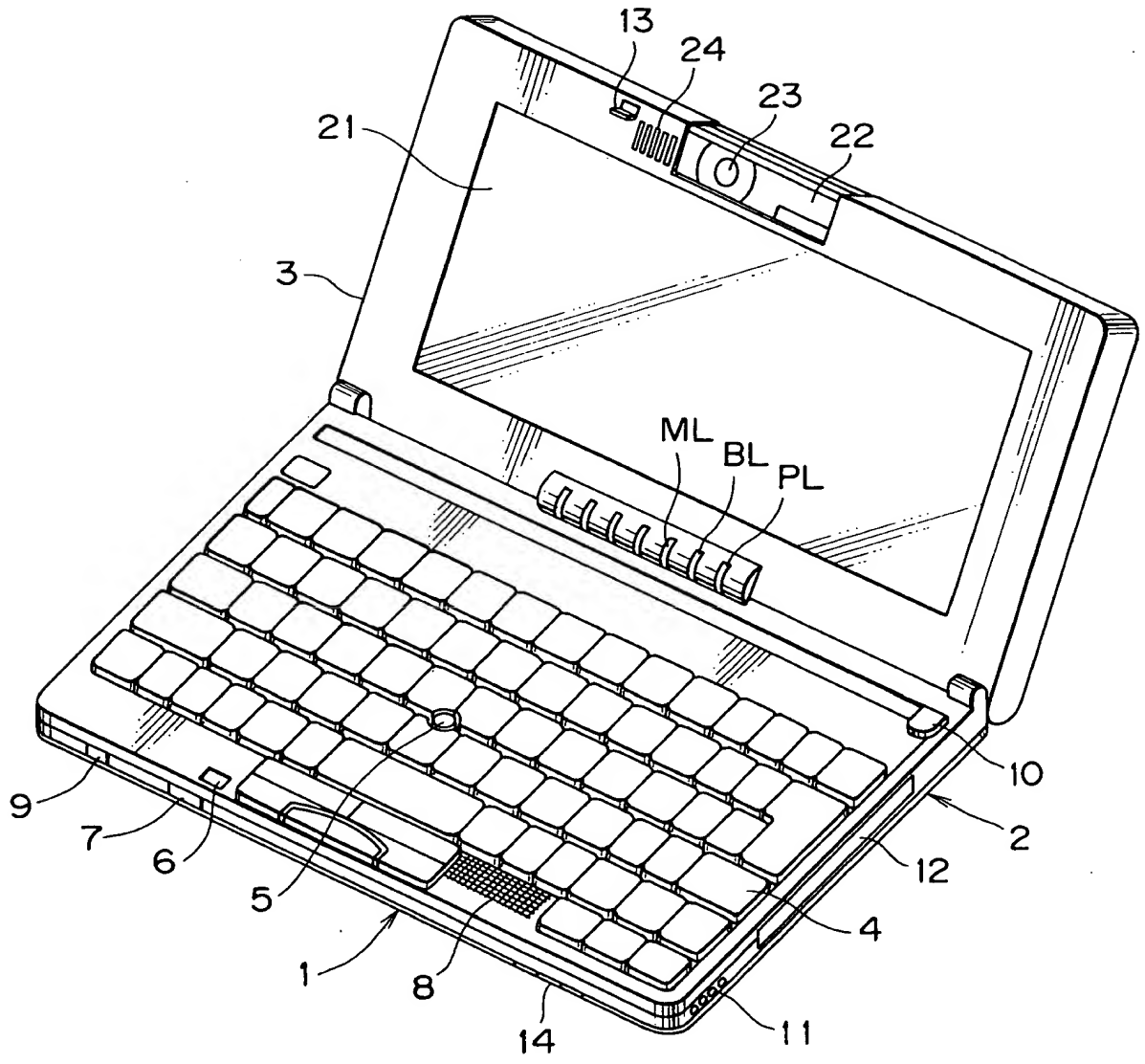

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FIG. 2

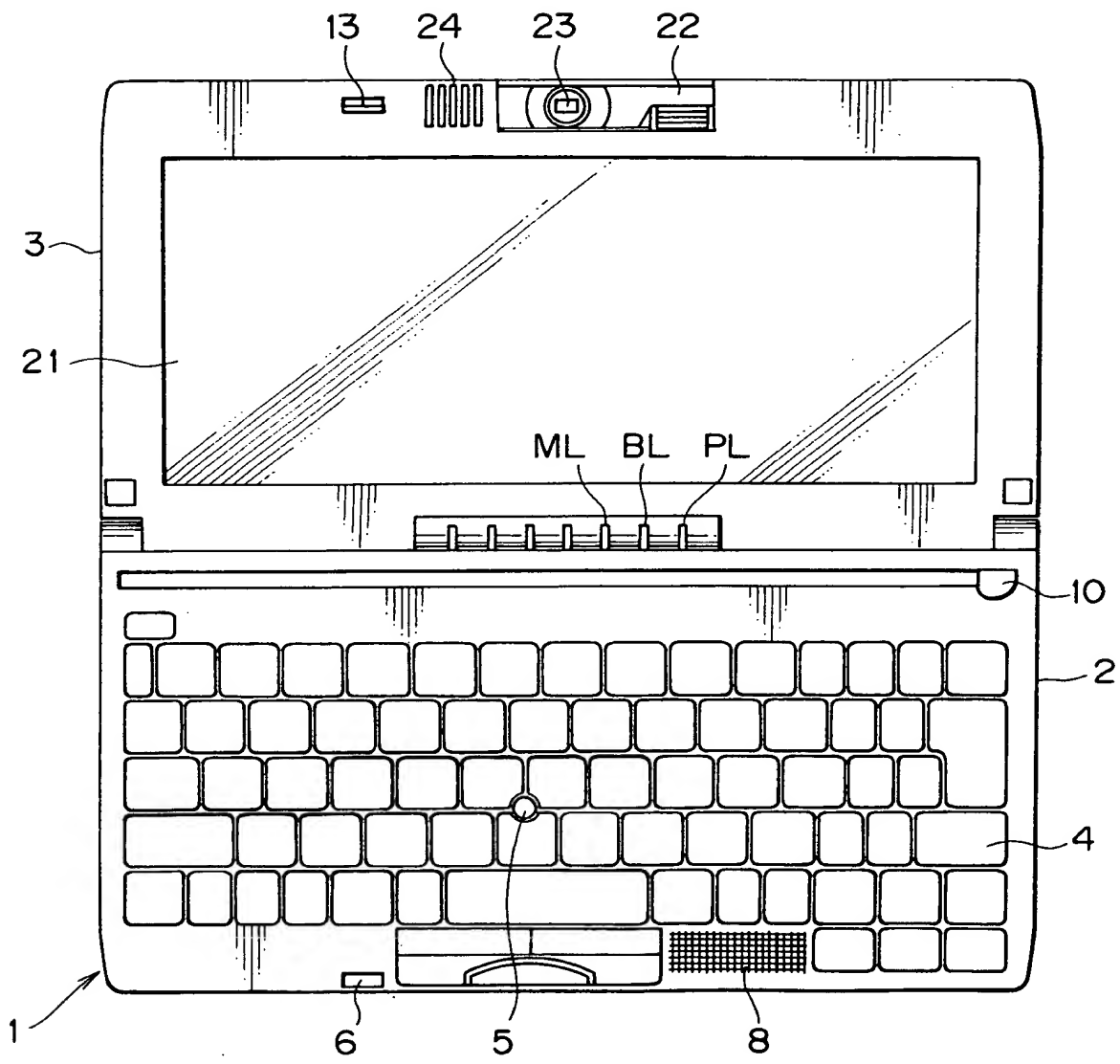

FIG. 3

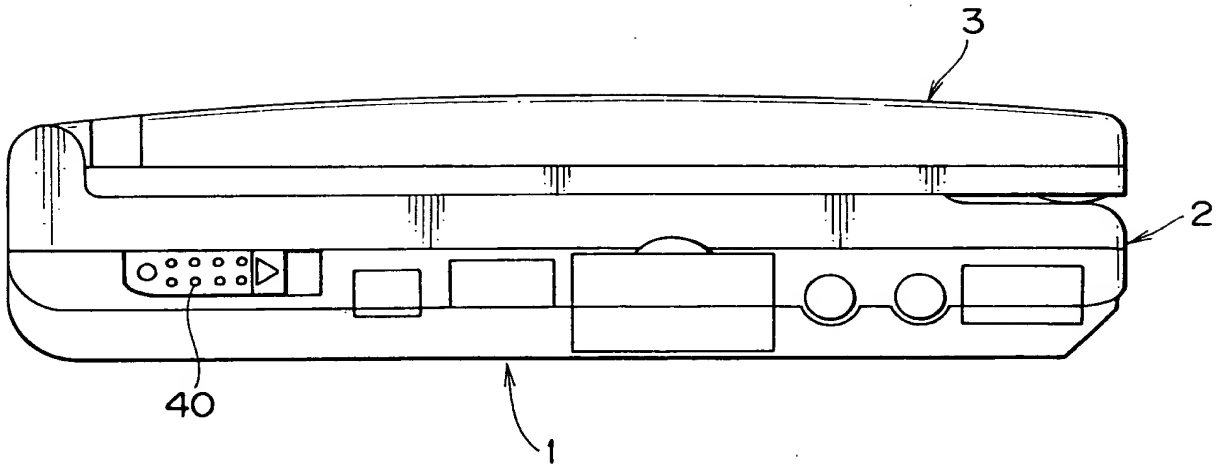

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FIG. 4

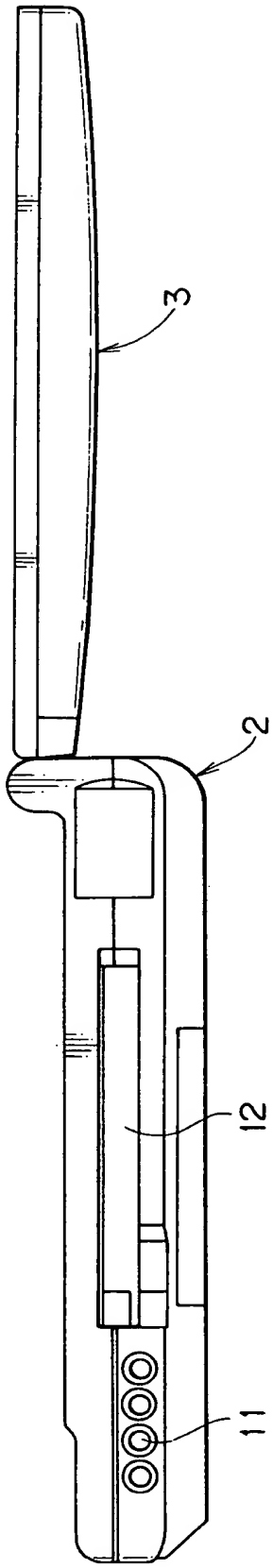

FIG. 5

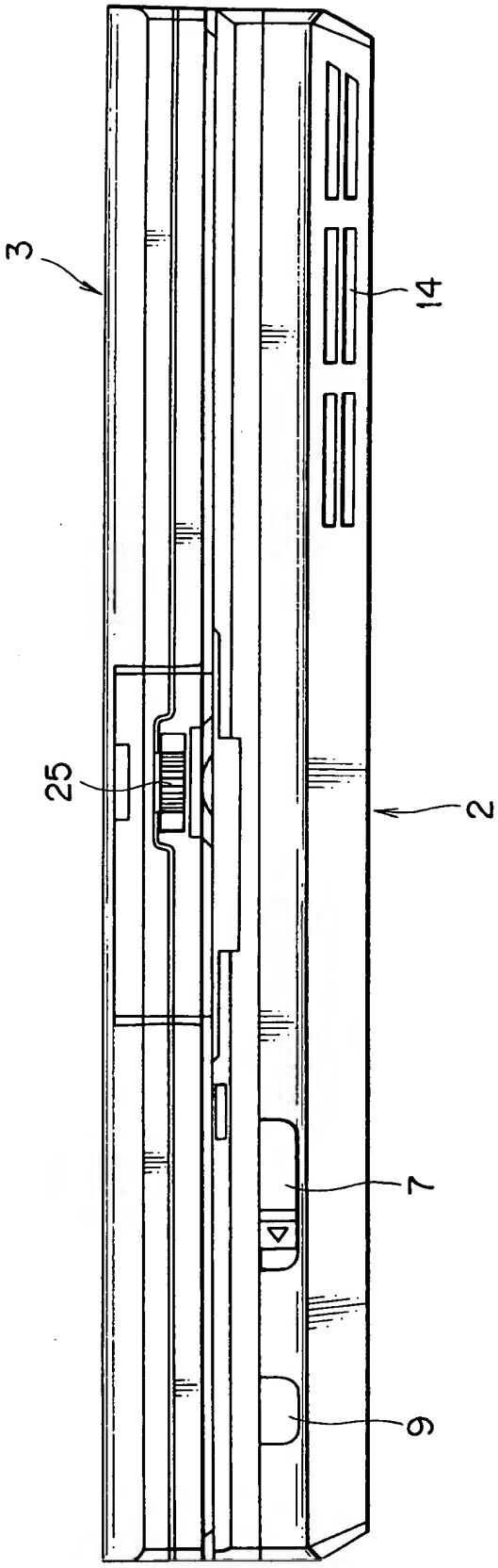

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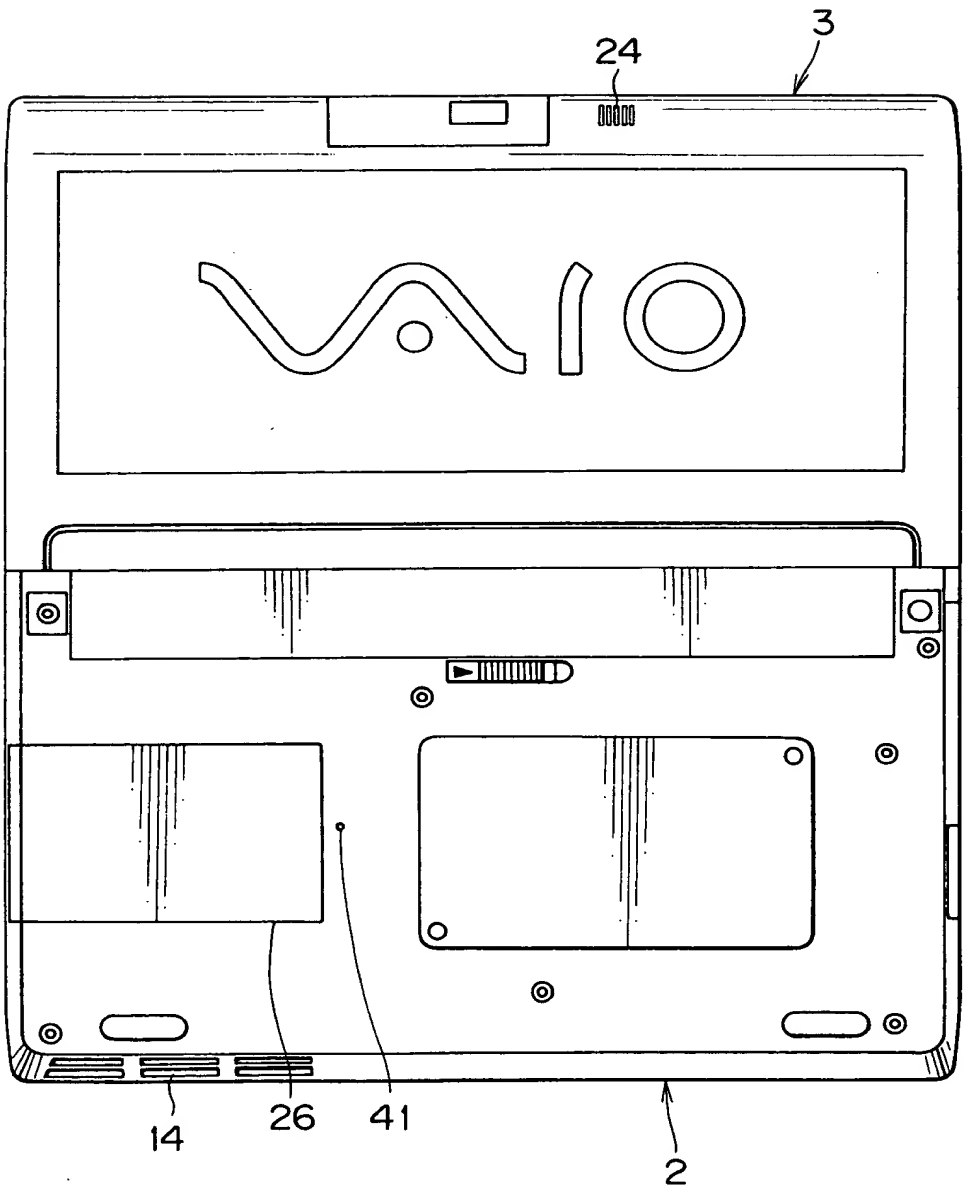
FIG. 6



0954865 - 082508

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FIG. 7

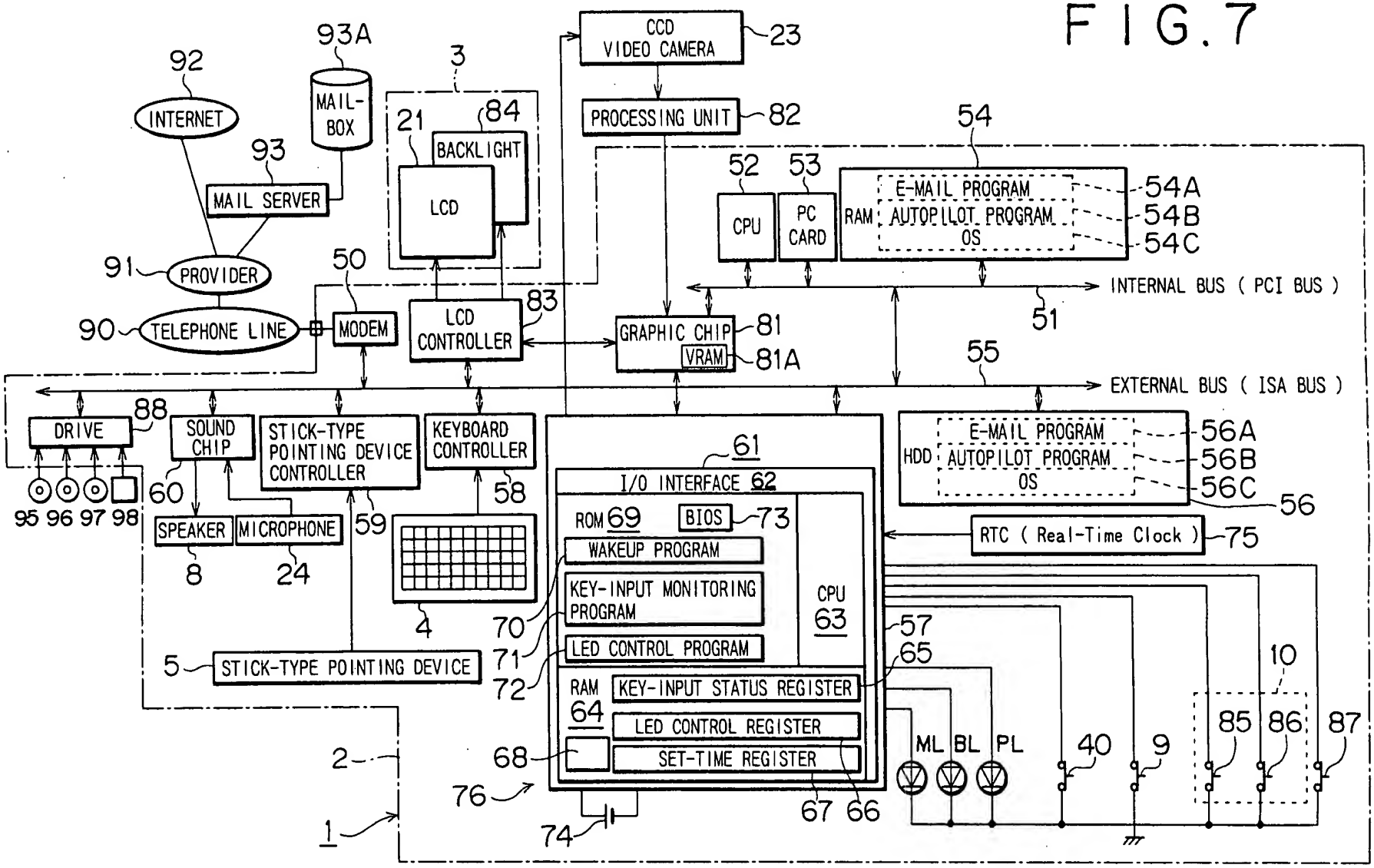

FIG.8

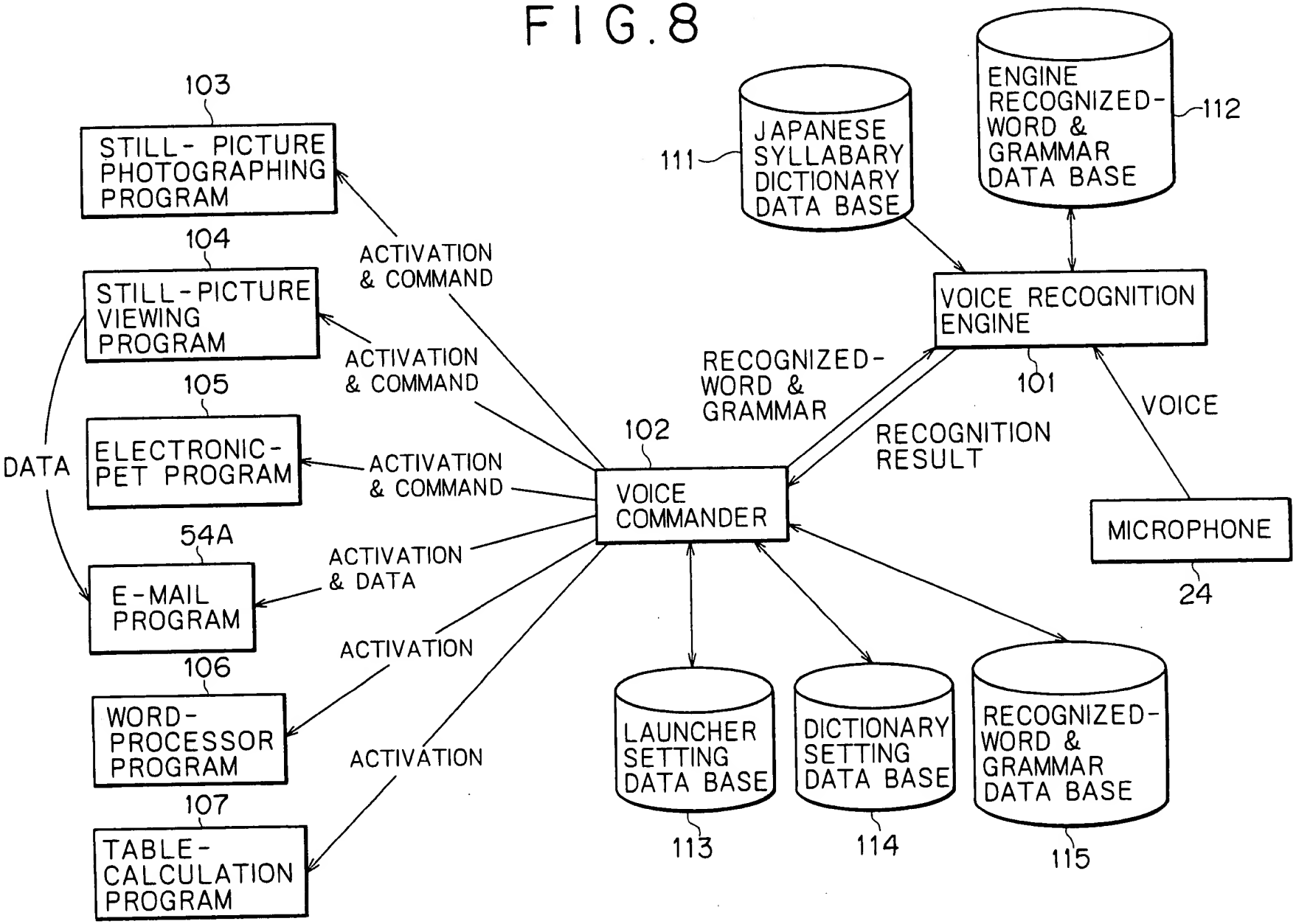
103
STILL- PICTURE PHOTOGRAPHING PROGRAM
104
STILL-PICTURE VIEWING PROGRAM
105
ELECTRONIC-PET PROGRAM
54A
E-MAIL PROGRAM
106
WORD-PROCESSOR PROGRAM
107
TABLE-CALCULATION PROGRAM
DATA
ACTIVATION & COMMAND
ACTIVATION & COMMAND
ACTIVATION & COMMAND
ACTIVATION & DATA
ACTIVATION
ACTIVATION
102
VOICE COMMANDER
111
JAPANESE SYLLABARY DICTIONARY DATA BASE
ENGINE RECOGNIZED-WORD & GRAMMAR DATA BASE
112
VOICE RECOGNITION ENGINE
101
RECOGNIZED-WORD & GRAMMAR
RECOGNITION RESULT
VOICE
MICROPHONE
24
LAUNCHER SETTING DATA BASE
113
DICTIONARY SETTING DATA BASE
114
RECOGNIZED-WORD & GRAMMAR DATA BASE
115

FIG. 9

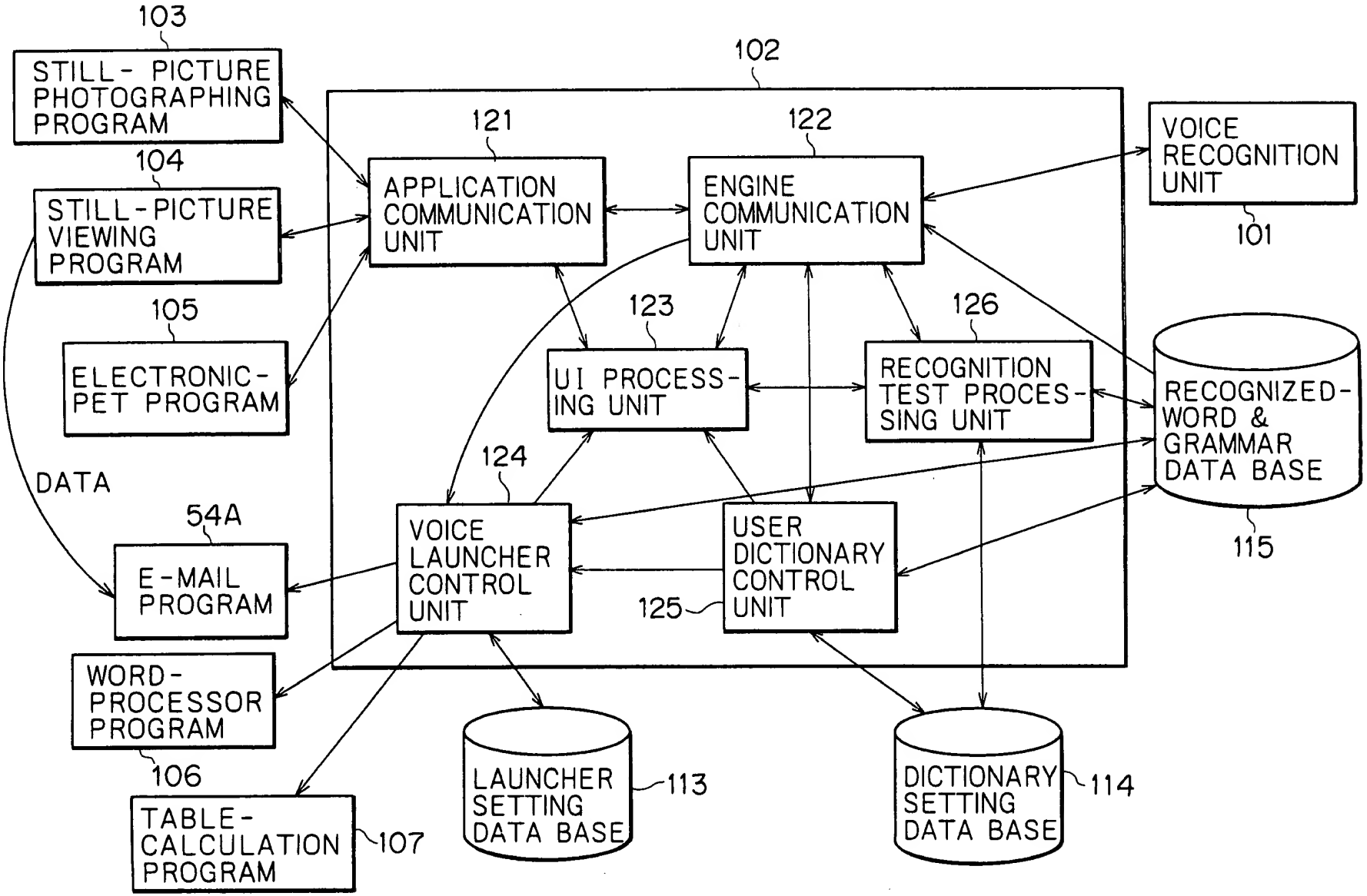
103
STILL- PICTURE PHOTOGRAPHING PROGRAM
104
STILL-PICTURE VIEWING PROGRAM
105
ELECTRONIC-PET PROGRAM
DATA
54A
E-MAIL PROGRAM
WORD-PROCESSOR PROGRAM
106
TABLE-CALCULATION PROGRAM
107
102
121
APPLICATION COMMUNICATION UNIT
122
ENGINE COMMUNICATION UNIT
123
UI PROCESS-ING UNIT
126
RECOGNITION TEST PROCES-SING UNIT
124
VOICE LAUNCHER CONTROL UNIT
USER DICTIONARY CONTROL UNIT
125
VOICE RECOGNITION UNIT
101
RECOGNIZED-WORD & GRAMMAR DATA BASE
115
LAUNCHER SETTING DATA BASE
113
DICTIONARY SETTING DATA BASE
114

FIG.10

```
[Grammar]
Type = cfg

[ 〈Start〉 ]
〈Start〉 = 〈Global〉
〈Start〉 =(SVCommand)

[(SVCommand)]
102 = HELP
104 = PREVIOUS
104 = PREVIOUS PICTURE
105 = NEXT
105 = NEXT PICTURE
0×7fffffff= 〈SendMail〉

[ 〈SendMail〉 ]
〈SendMail〉 = SEND A MAIL TO  〈Email〉
〈SendMail〉 = MAIL

[ 〈Email〉 ]
〈Email〉 = " daddy@test.company.co.jp." PAPA

[ 〈Global〉 ]
〈Global〉 =(ChangeWin)
〈Global〉 =(VoiceCommand)

[(ChangeWin)]
6001 = STILL-PICTURE PHOTOGRAPHING PROGRAM
6002 = ELECTRONIC-PET PROGRAM
6004 = STILL-PICTURE VIEWING PROGRAM

[(VoiceCommand)]
1= 〈VCmd〉

[ 〈VCmd〉 ]
〈VCmd〉 = " C:¥¥shougi.exe"  SHOGI GAME
```

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FIG.11

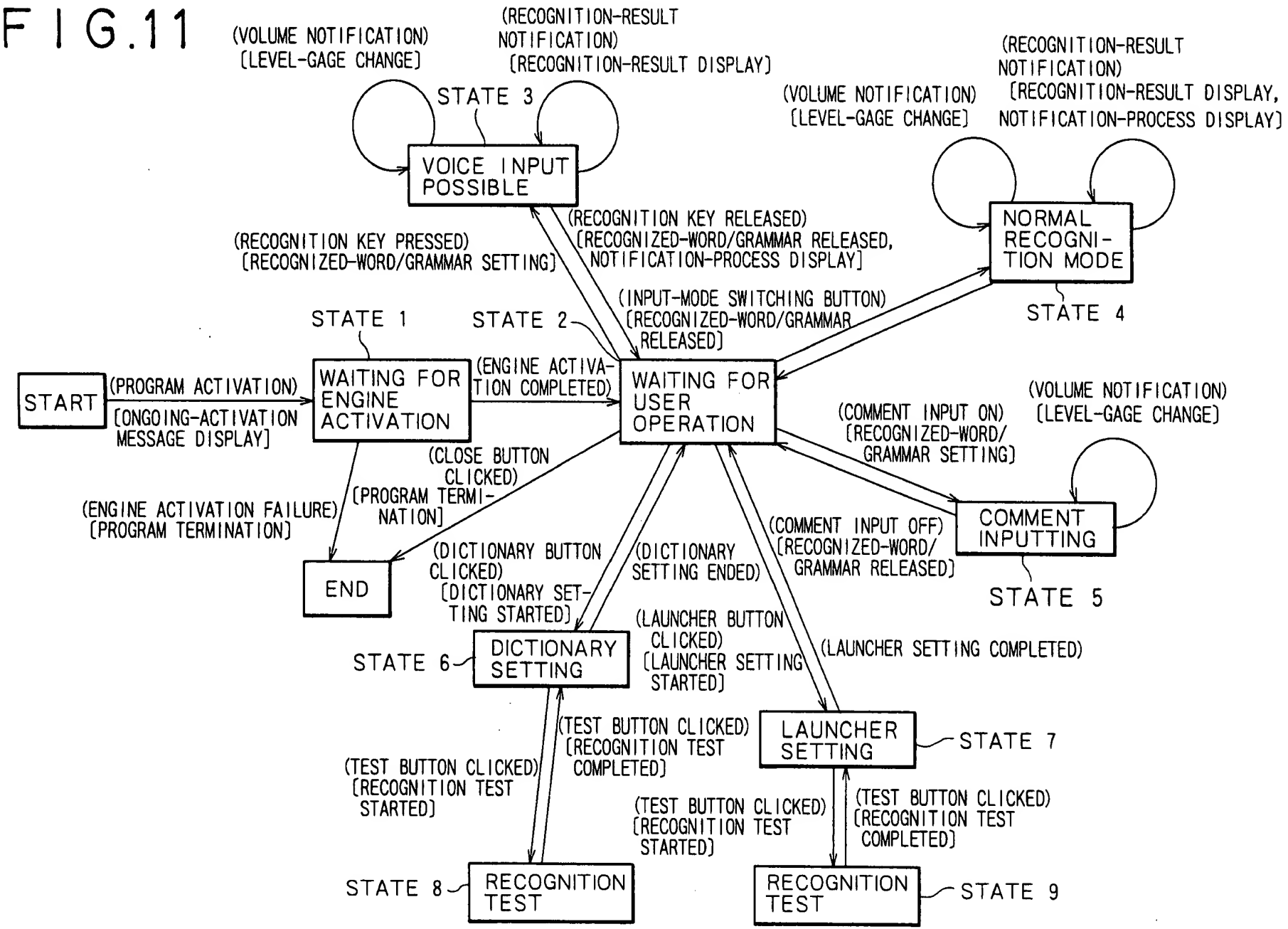
(VOLUME NOTIFICATION)
[LEVEL-GAGE CHANGE]
(RECOGNITION-RESULT NOTIFICATION)
[RECOGNITION-RESULT DISPLAY]
STATE 3
VOICE INPUT POSSIBLE
(VOLUME NOTIFICATION)
[LEVEL-GAGE CHANGE]
(RECOGNITION-RESULT NOTIFICATION)
[RECOGNITION-RESULT DISPLAY, NOTIFICATION-PROCESS DISPLAY]
NORMAL RECOGNITION MODE
STATE 4
(RECOGNITION KEY RELEASED)
[RECOGNIZED-WORD/GRAMMAR RELEASED, NOTIFICATION-PROCESS DISPLAY]
(RECOGNITION KEY PRESSED)
[RECOGNIZED-WORD/GRAMMAR SETTING]
(INPUT-MODE SWITCHING BUTTON)
[RECOGNIZED-WORD/GRAMMAR RELEASED]
STATE 1
STATE 2
START
(PROGRAM ACTIVATION)
[ONGOING-ACTIVATION MESSAGE DISPLAY]
WAITING FOR ENGINE ACTIVATION
(ENGINE ACTIVATION COMPLETED)
WAITING FOR USER OPERATION
(VOLUME NOTIFICATION)
[LEVEL-GAGE CHANGE]
(COMMENT INPUT ON)
[RECOGNIZED-WORD/GRAMMAR SETTING]
(CLOSE BUTTON CLICKED)
[PROGRAM TERMINATION]
(ENGINE ACTIVATION FAILURE)
[PROGRAM TERMINATION]
END
COMMENT INPUTTING
(COMMENT INPUT OFF)
[RECOGNIZED-WORD/GRAMMAR RELEASED]
STATE 5
(DICTIONARY BUTTON CLICKED)
[DICTIONARY SETTING STARTED]
(DICTIONARY SETTING ENDED)
(LAUNCHER BUTTON CLICKED)
[LAUNCHER SETTING STARTED]
(LAUNCHER SETTING COMPLETED)
STATE 6
DICTIONARY SETTING
LAUNCHER SETTING
STATE 7
(TEST BUTTON CLICKED)
[RECOGNITION TEST COMPLETED]
(TEST BUTTON CLICKED)
[RECOGNITION TEST STARTED]
(TEST BUTTON CLICKED)
[RECOGNITION TEST STARTED]
(TEST BUTTON CLICKED)
[RECOGNITION TEST COMPLETED]
STATE 8
RECOGNITION TEST
RECOGNITION TEST
STATE 9

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FIG.12

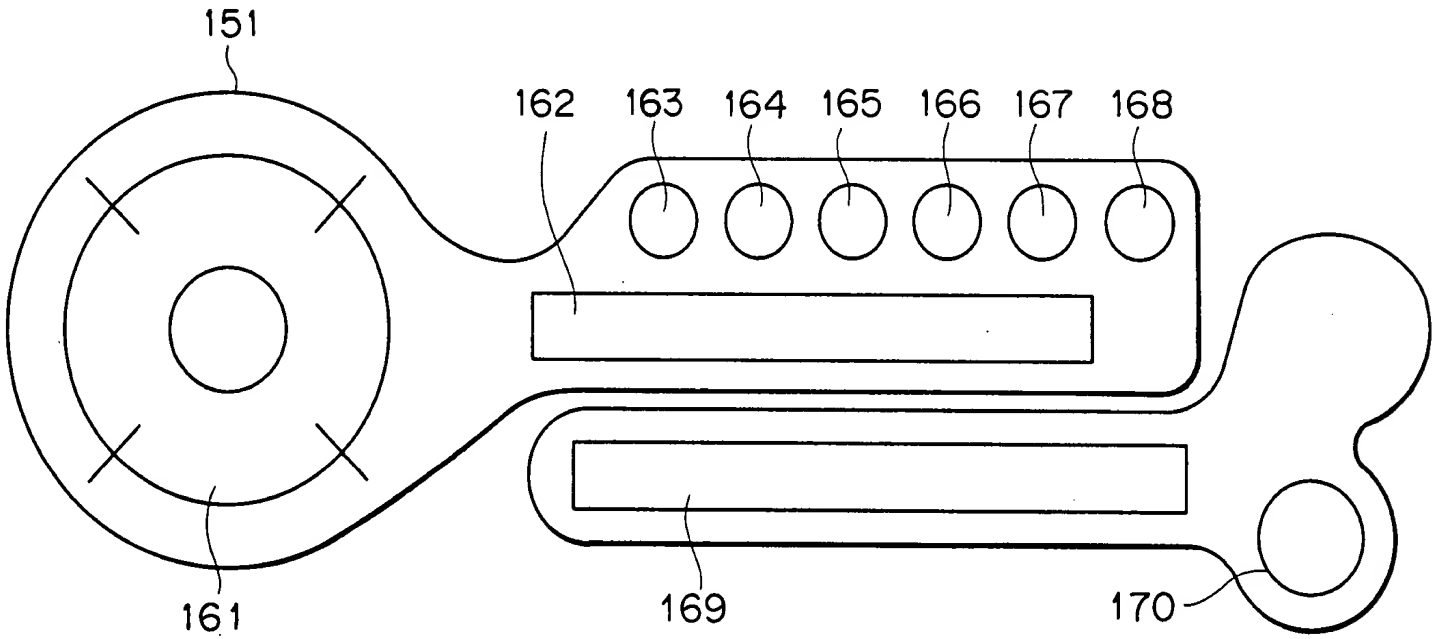

FIG.13

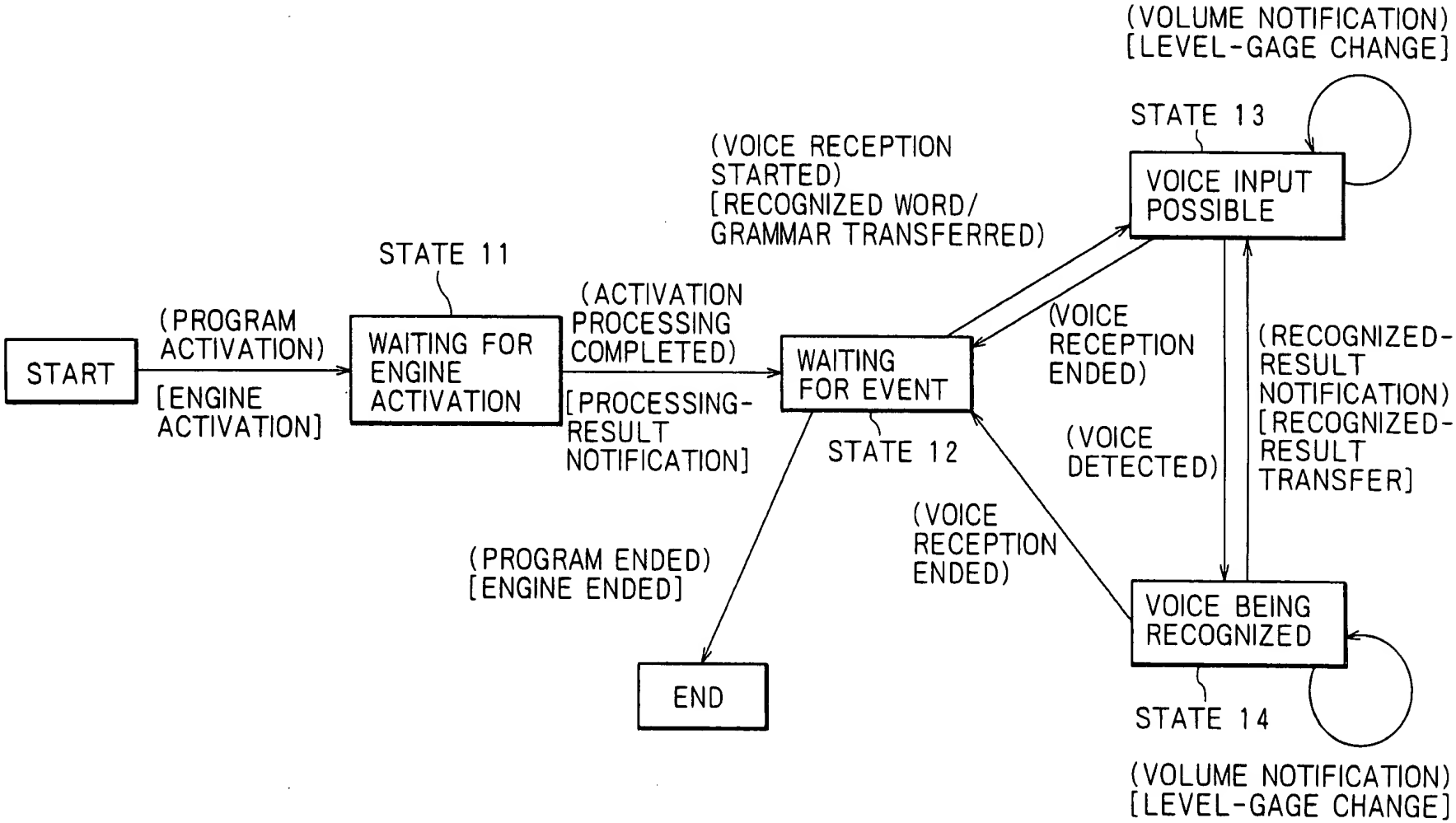
START
(PROGRAM ACTIVATION)
[ENGINE ACTIVATION]
STATE 11
WAITING FOR ENGINE ACTIVATION
(ACTIVATION PROCESSING COMPLETED)
[PROCESSING-RESULT NOTIFICATION]
WAITING FOR EVENT
STATE 12
(VOICE RECEPTION STARTED)
[RECOGNIZED WORD/ GRAMMAR TRANSFERRED)
STATE 13
VOICE INPUT POSSIBLE
(VOLUME NOTIFICATION)
[LEVEL-GAGE CHANGE]
(VOICE RECEPTION ENDED)
(VOICE DETECTED)
(RECOGNIZED-RESULT NOTIFICATION)
[RECOGNIZED-RESULT TRANSFER]
(VOICE RECEPTION ENDED)
VOICE BEING RECOGNIZED
STATE 14
(VOLUME NOTIFICATION)
[LEVEL-GAGE CHANGE]
(PROGRAM ENDED)
[ENGINE ENDED]
END

FIG.14

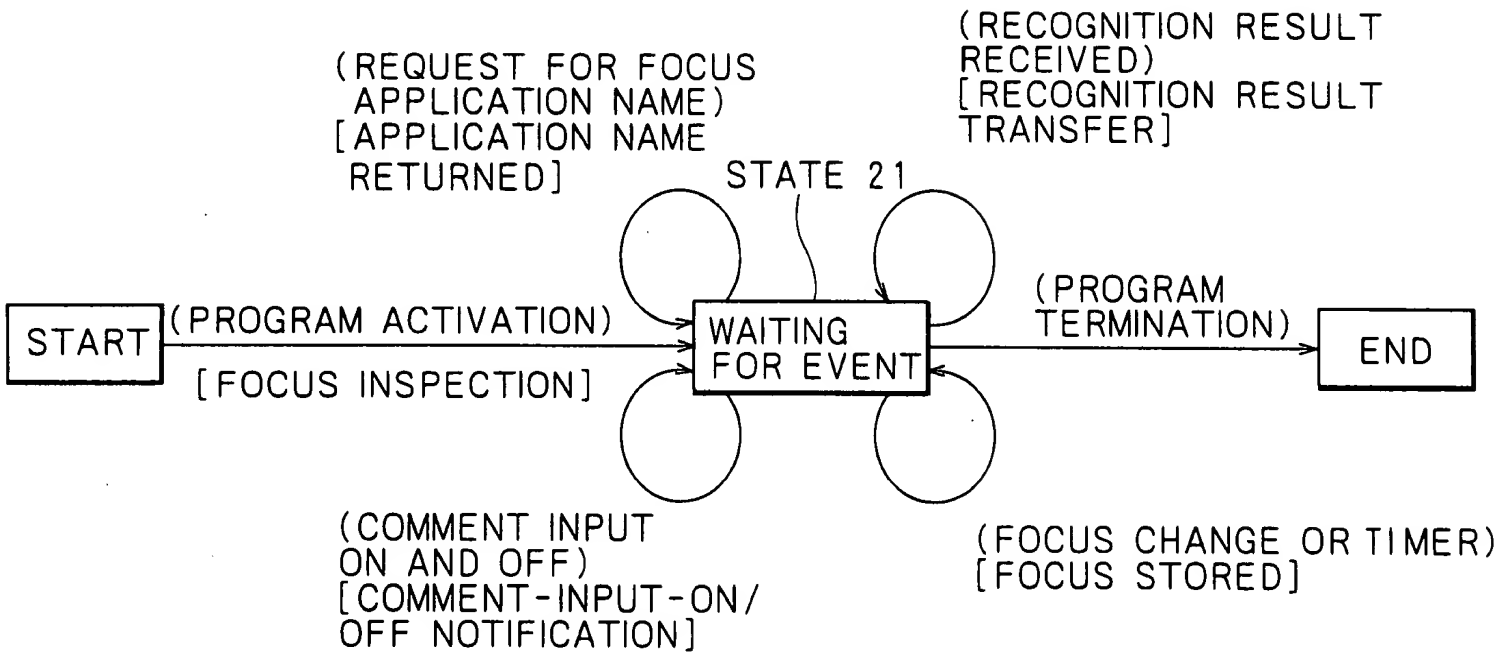
(REQUEST FOR FOCUS APPLICATION NAME)
[APPLICATION NAME RETURNED]
(RECOGNITION RESULT RECEIVED)
[RECOGNITION RESULT TRANSFER]
STATE 21
START
(PROGRAM ACTIVATION)
[FOCUS INSPECTION]
WAITING FOR EVENT
(PROGRAM TERMINATION)
END
(COMMENT INPUT ON AND OFF)
[COMMENT-INPUT-ON/OFF NOTIFICATION]
(FOCUS CHANGE OR TIMER)
[FOCUS STORED]

FIG.15

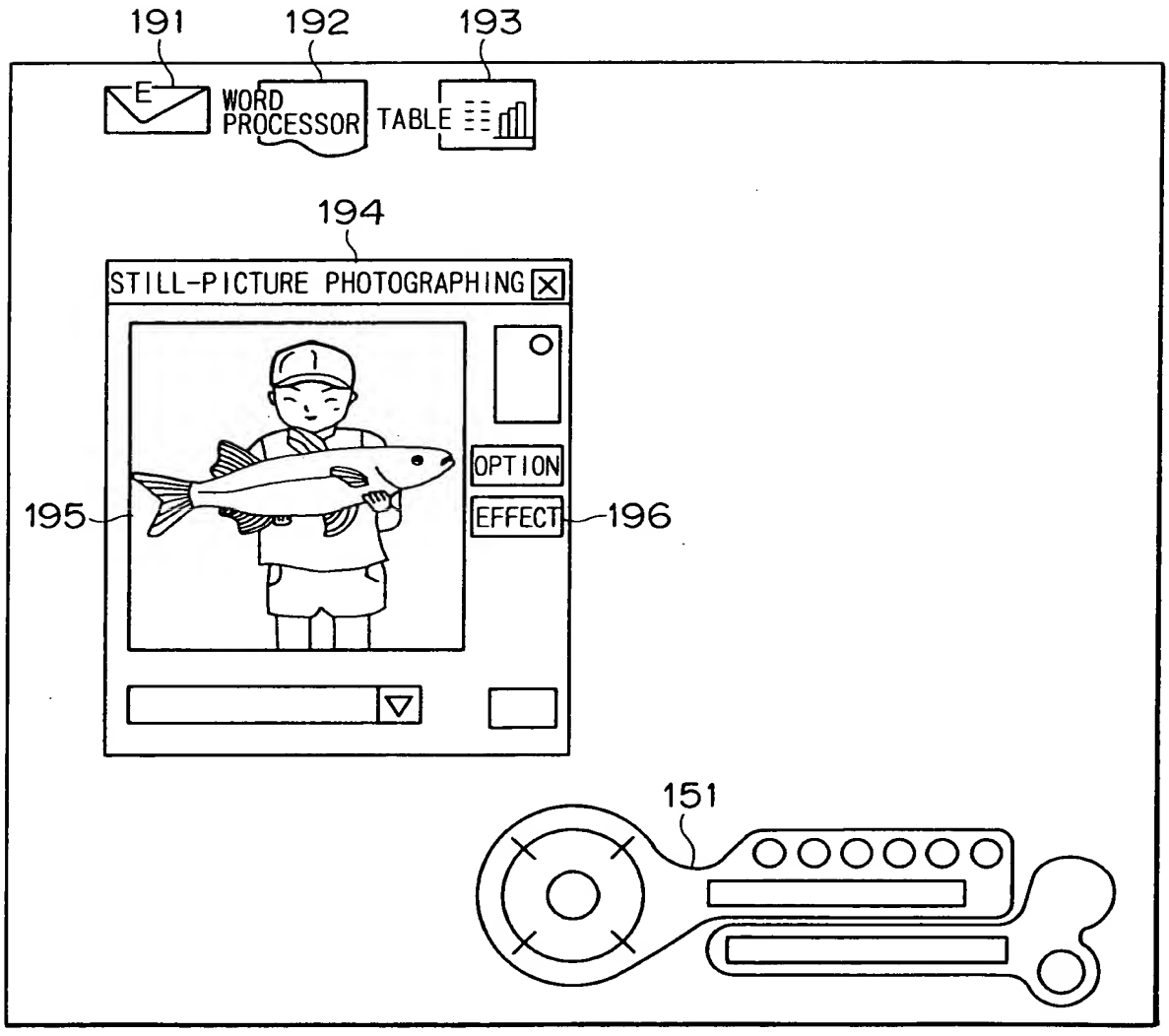

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FIG.16

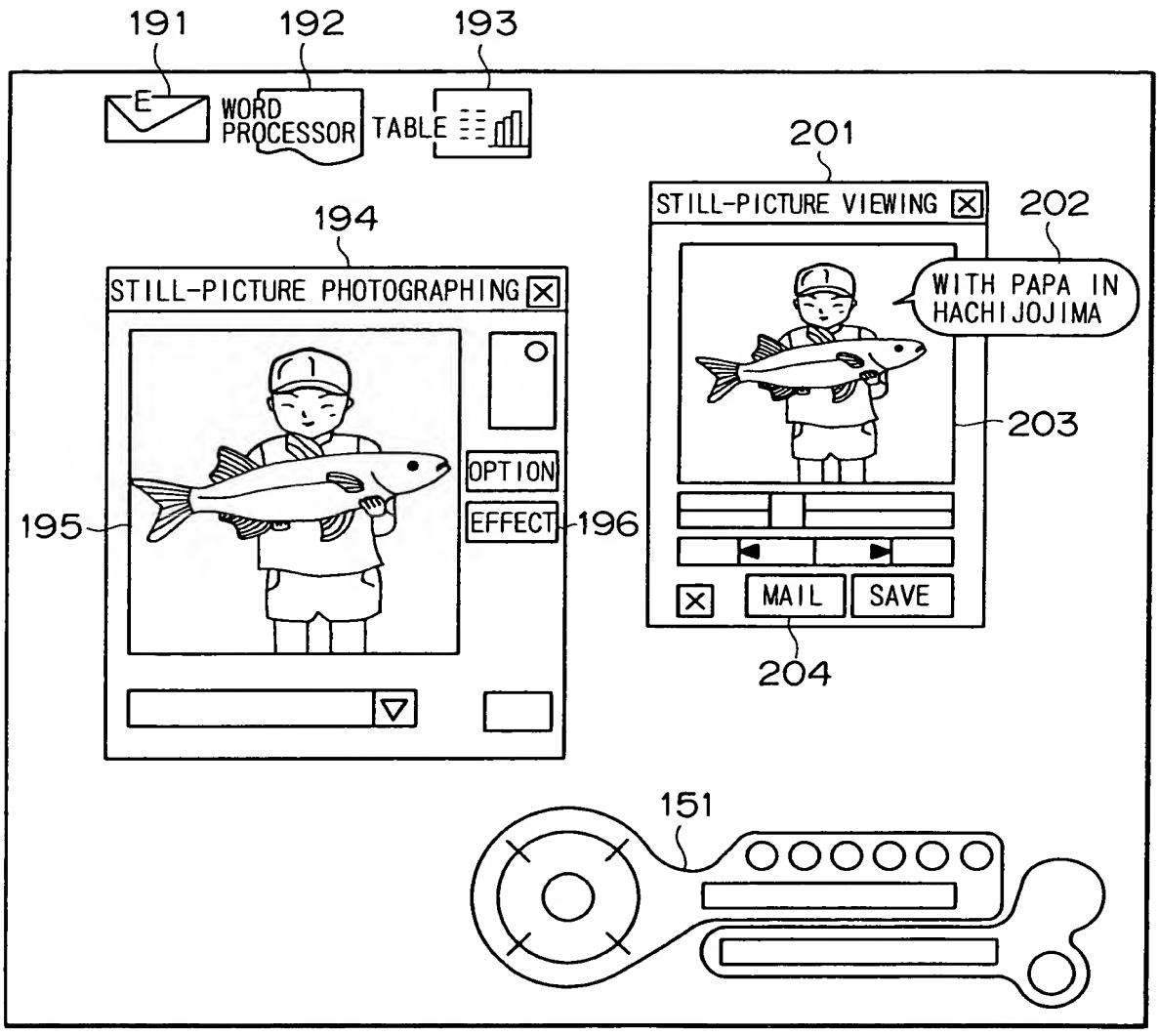
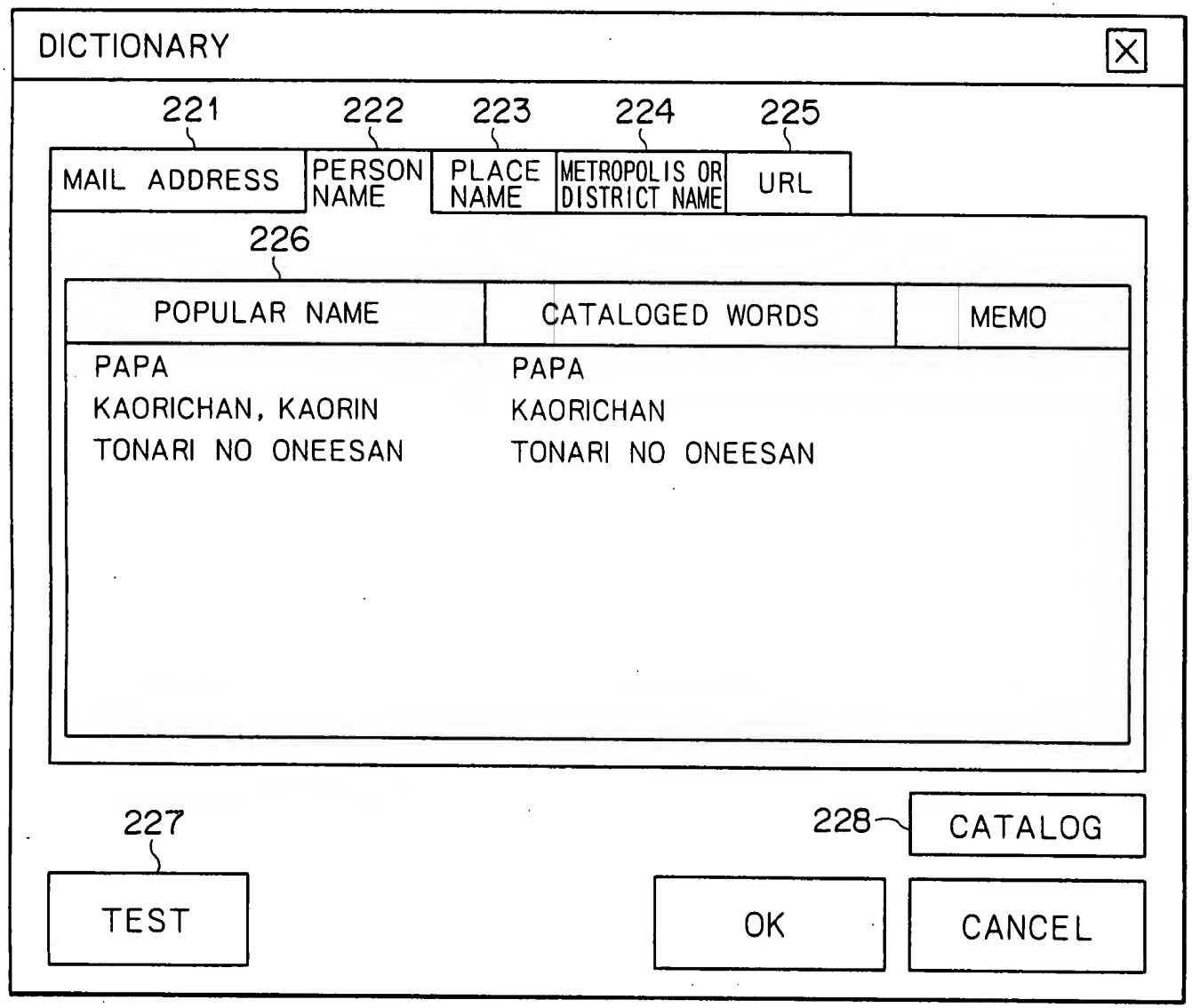

191
192
193
E
WORD PROCESSOR
TABLE
201
STILL-PICTURE VIEWING
202
WITH PAPA IN HACHIJOJIMA
194
STILL-PICTURE PHOTOGRAPHING
203
OPTION
195
EFFECT
196
MAIL
SAVE
204
151

FIG.17


DICTIONARY
221
222
223
224
225
MAIL ADDRESS
PERSON NAME
PLACE NAME
METROPOLIS OR DISTRICT NAME
URL
226
POPULAR NAME
CATALOGED WORDS
MEMO
PAPA
PAPA
KAORICHAN, KAORIN
KAORICHAN
TONARI NO ONEESAN
TONARI NO ONEESAN
227
TEST
228
CATALOG
OK
CANCEL

0054853-092500

FIG.18

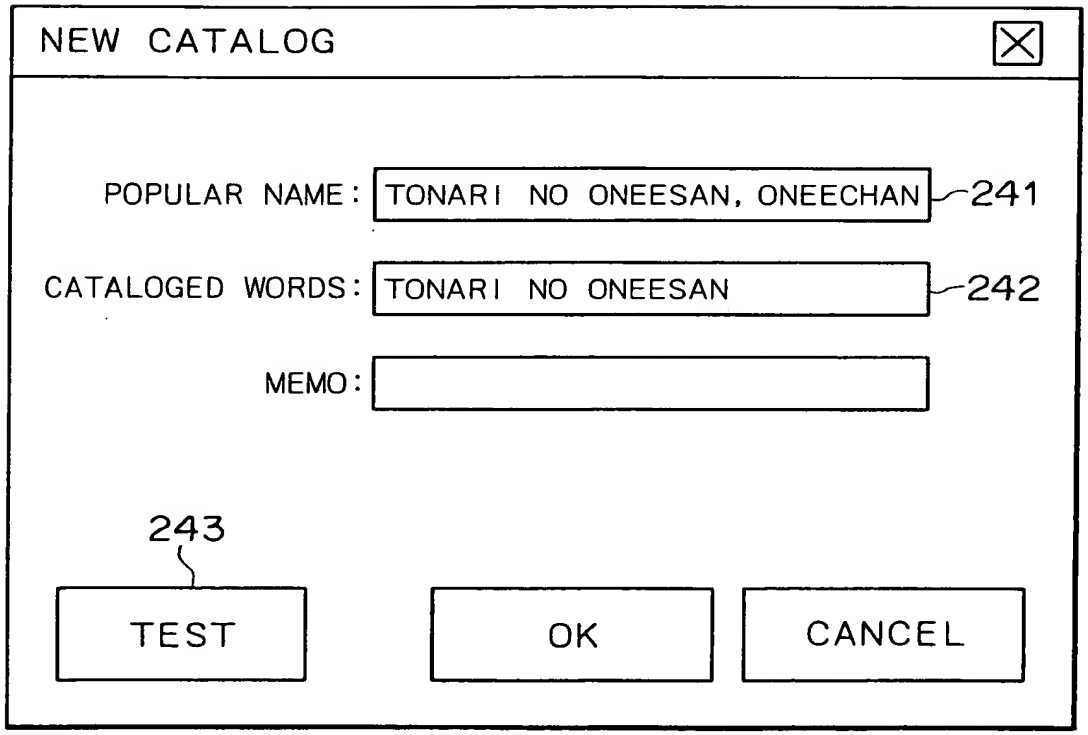


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FIG.19

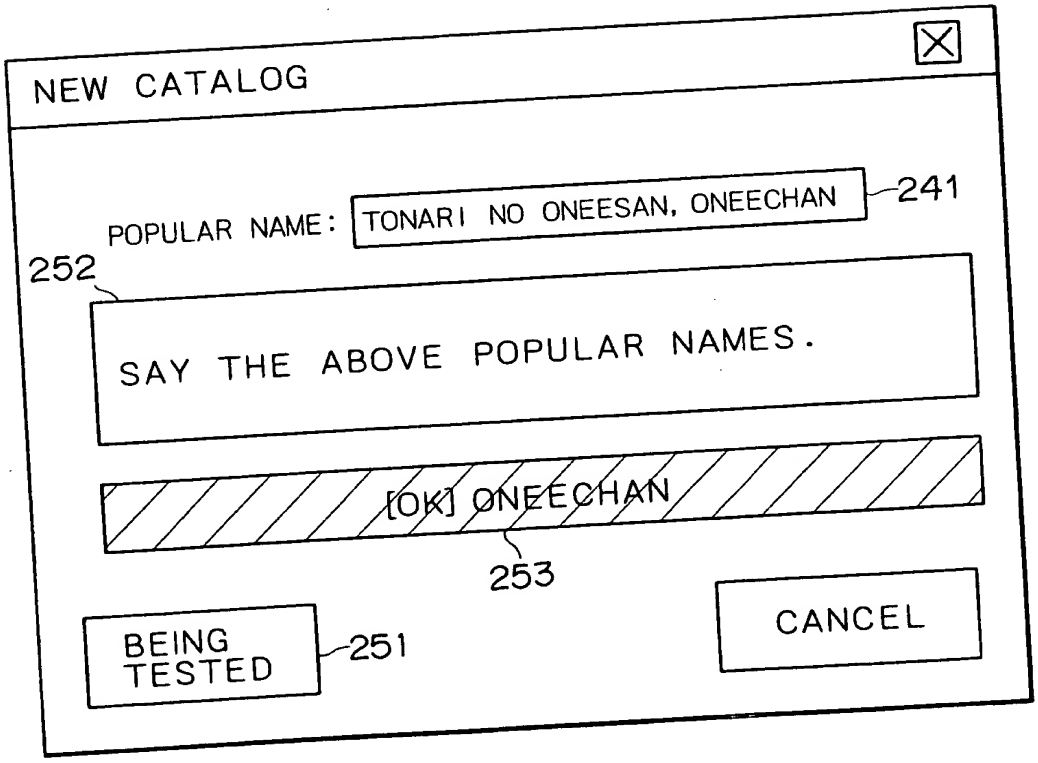


FIG.20

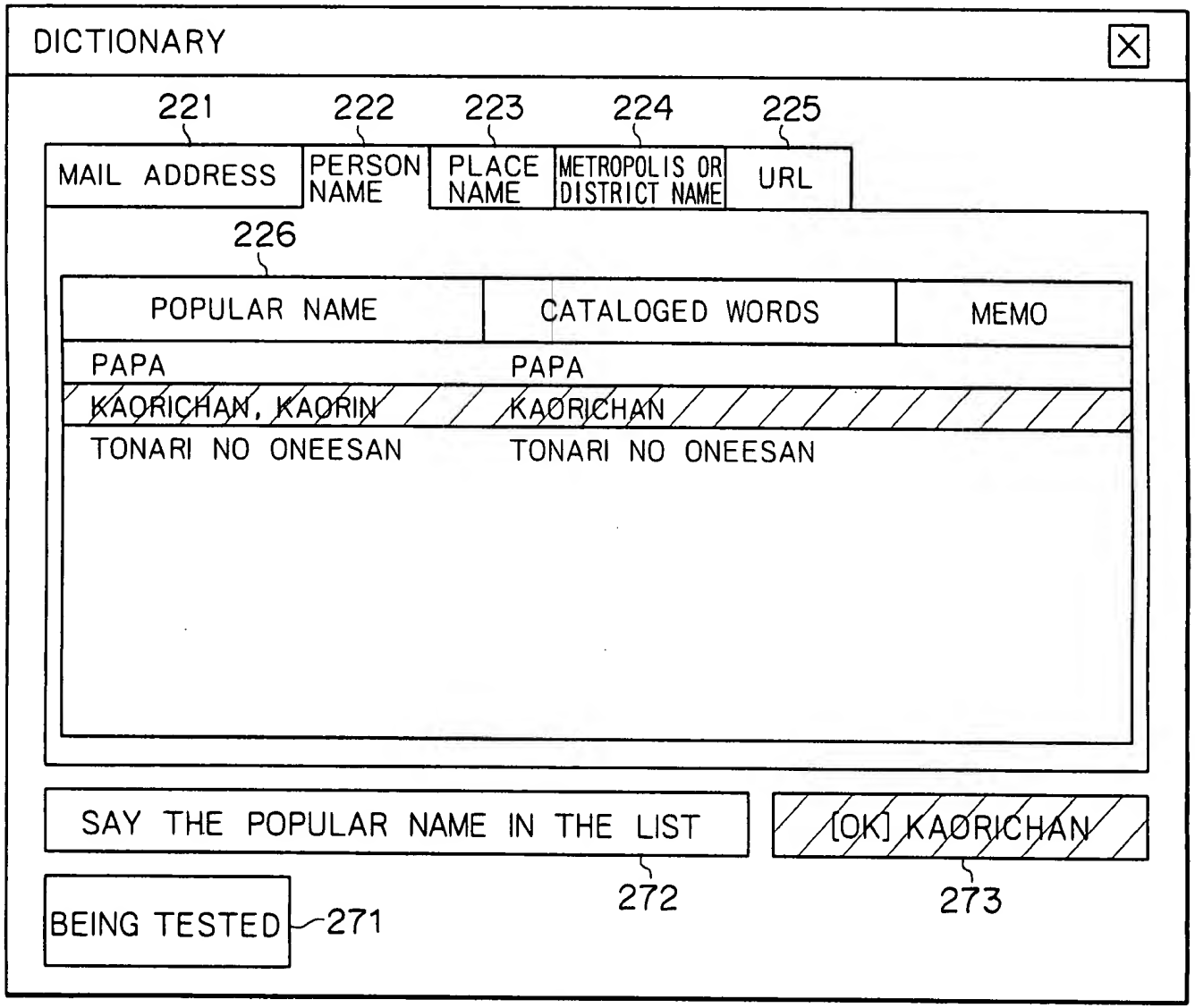

DICTIONARY
221
222
223
224
225
MAIL ADDRESS
PERSON NAME
PLACE NAME
METROPOLIS OR DISTRICT NAME
URL
226
POPULAR NAME
CATALOGED WORDS
MEMO
PAPA
PAPA
KAORICHAN, KAORIN
KAORICHAN
TONARI NO ONEESAN
TONARI NO ONEESAN
SAY THE POPULAR NAME IN THE LIST
[OK] KAORICHAN
272
273
BEING TESTED
271

FIG.21

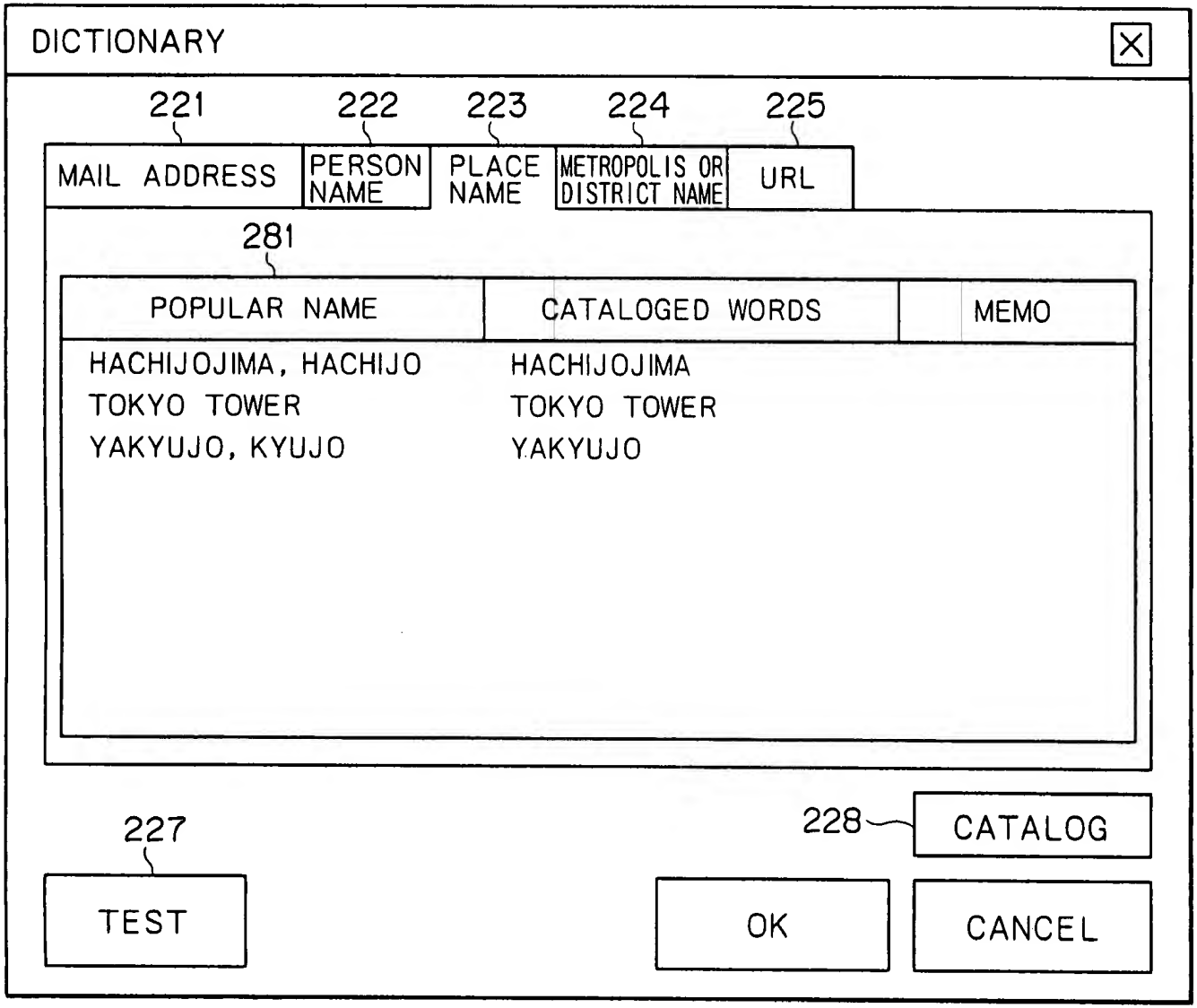

DICTIONARY
221
222
223
224
225
MAIL ADDRESS
PERSON NAME
PLACE NAME
METROPOLIS OR DISTRICT NAME
URL
281
POPULAR NAME
CATALOGED WORDS
MEMO
HACHIJOJIMA, HACHIJO
HACHIJOJIMA
TOKYO TOWER
TOKYO TOWER
YAKYUJO, KYUJO
YAKYUJO
227
TEST
228
CATALOG
OK
CANCEL

FIG. 22

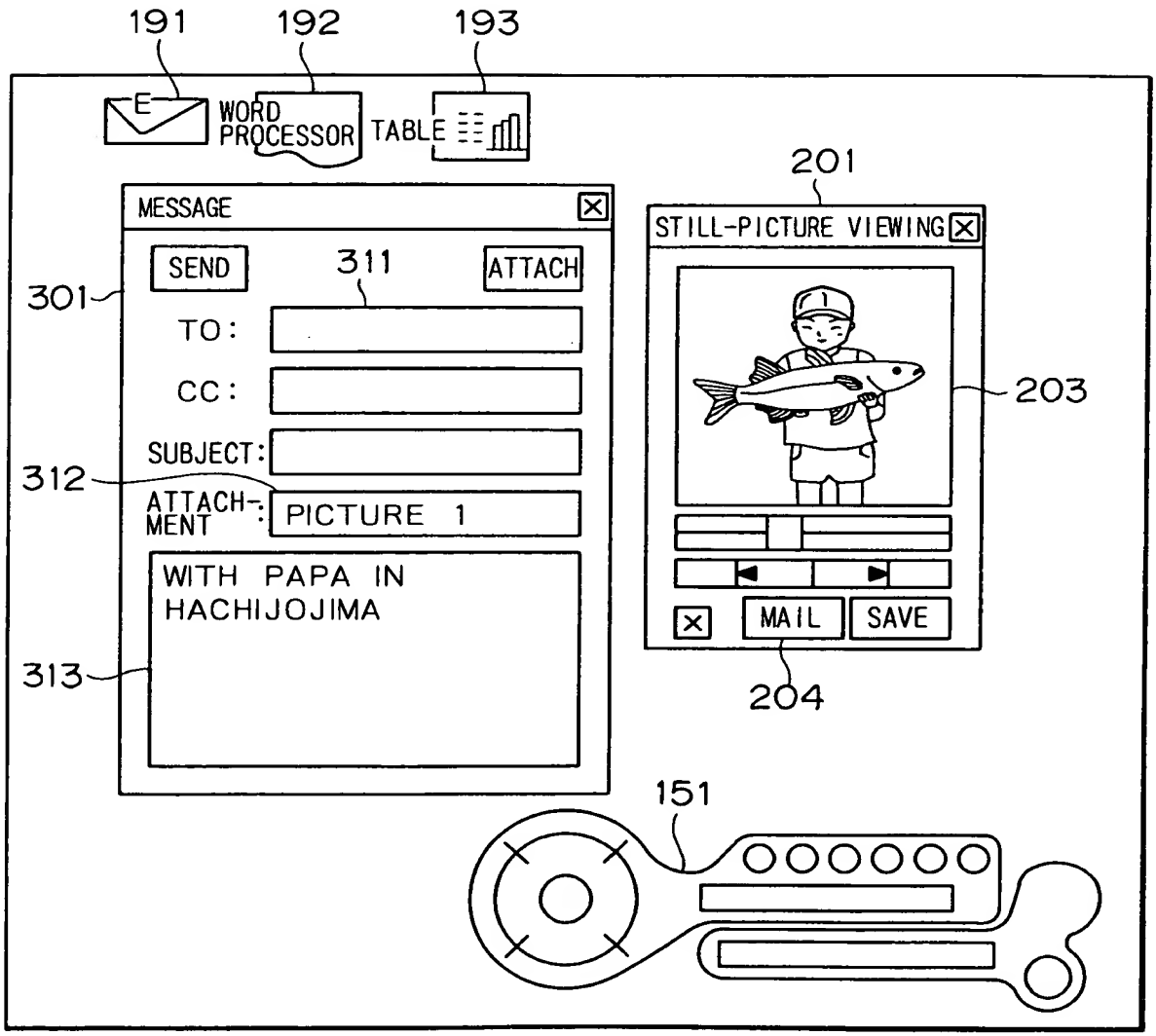

191
192
193
E
WORD PROCESSOR
TABLE
201
MESSAGE
STILL-PICTURE VIEWING
SEND
311
ATTACH
301
TO:
CC:
SUBJECT:
312
ATTACH-MENT:
PICTURE 1
WITH PAPA IN HACHIJOJIMA
313
203
MAIL
SAVE
204
151

FIG.23

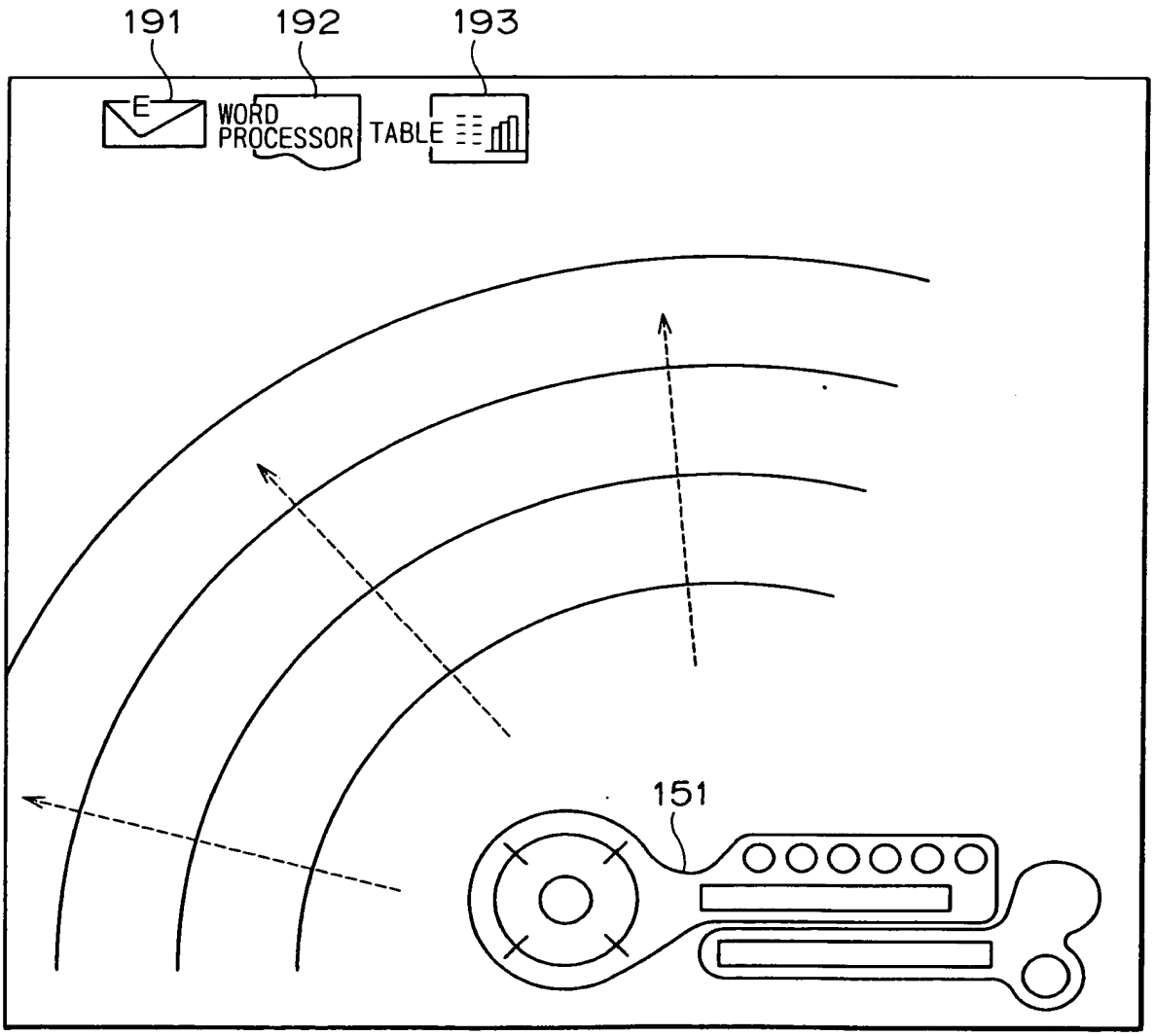


FIG.24

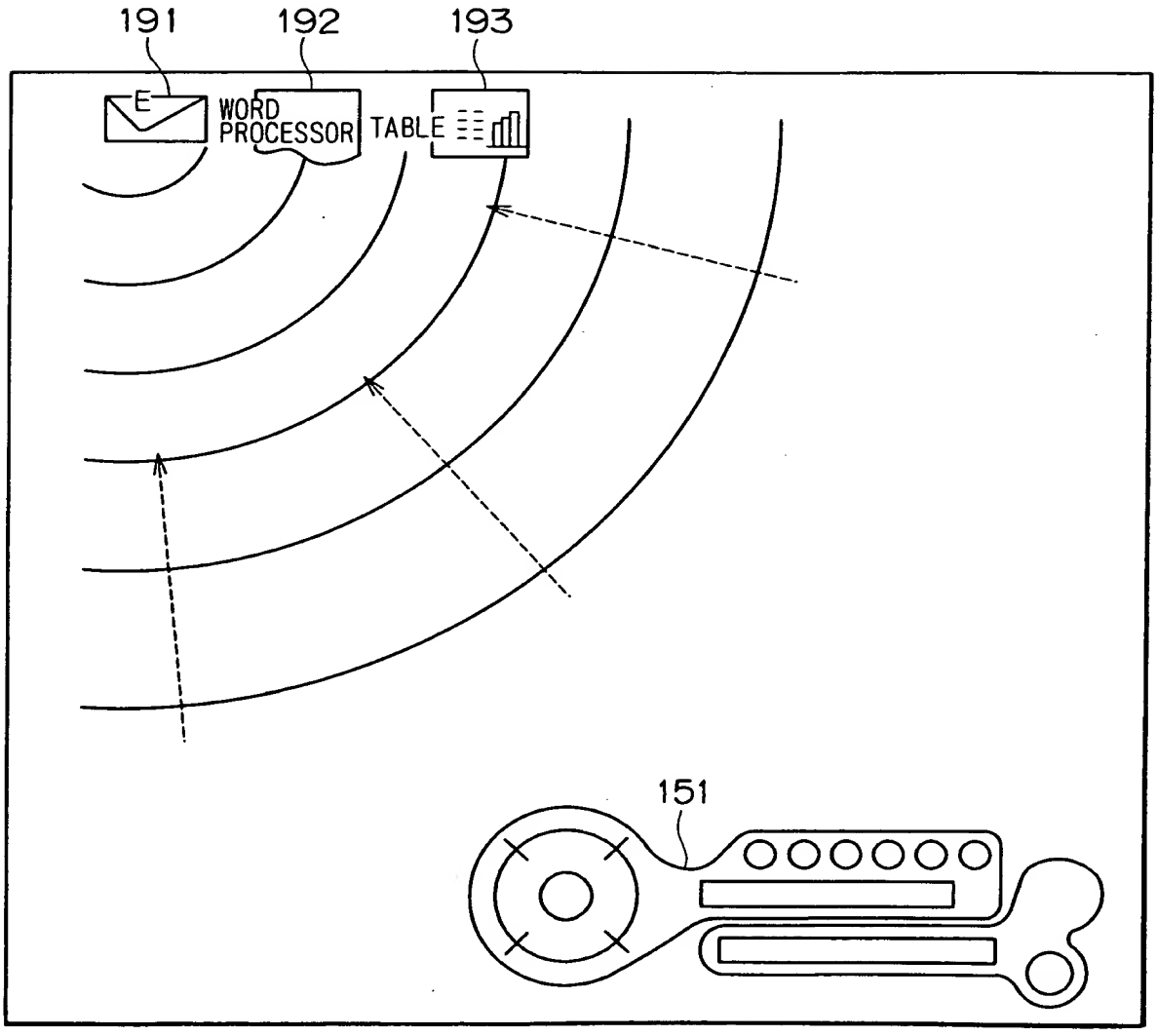


FIG.25

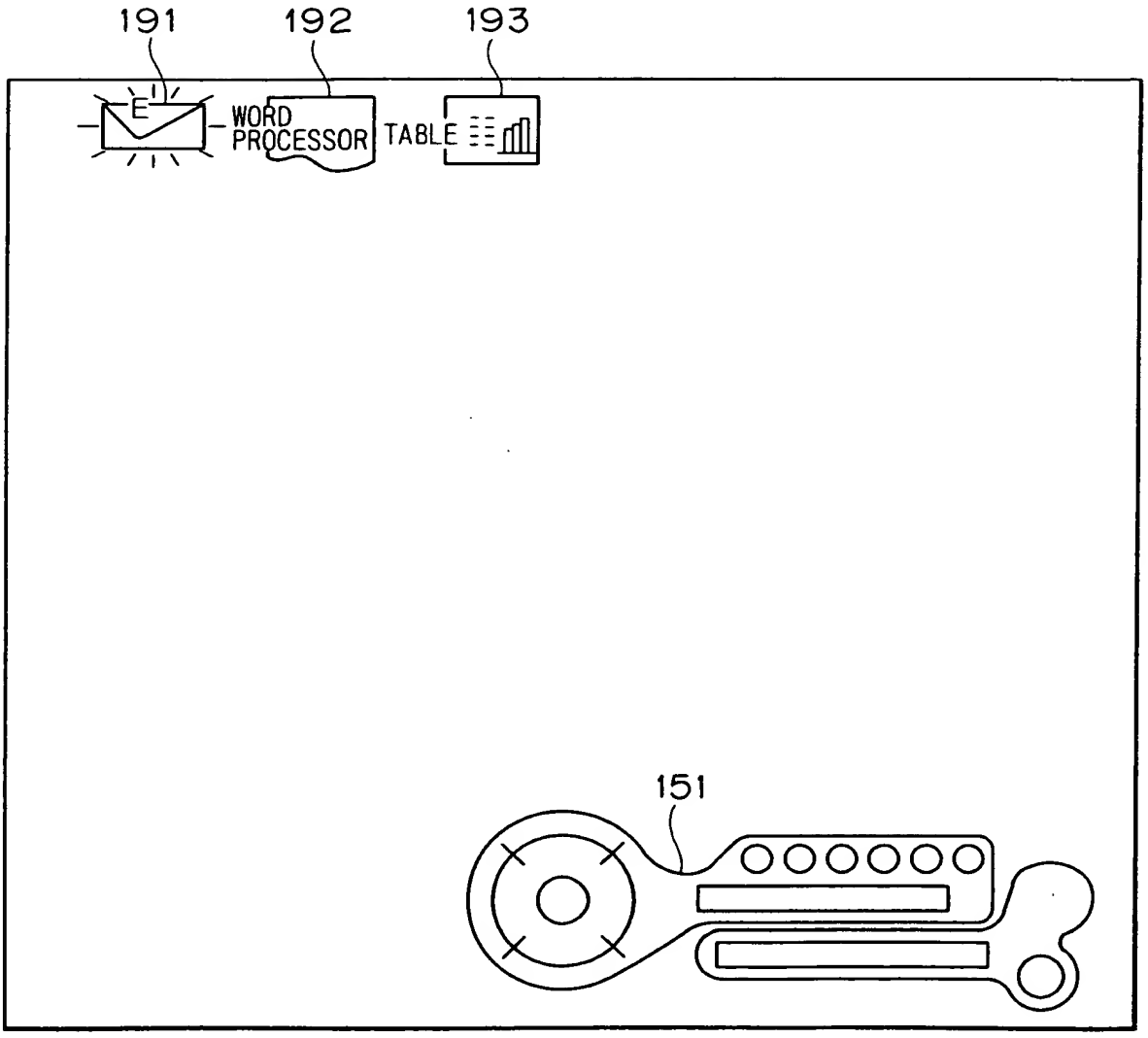


FIG. 26

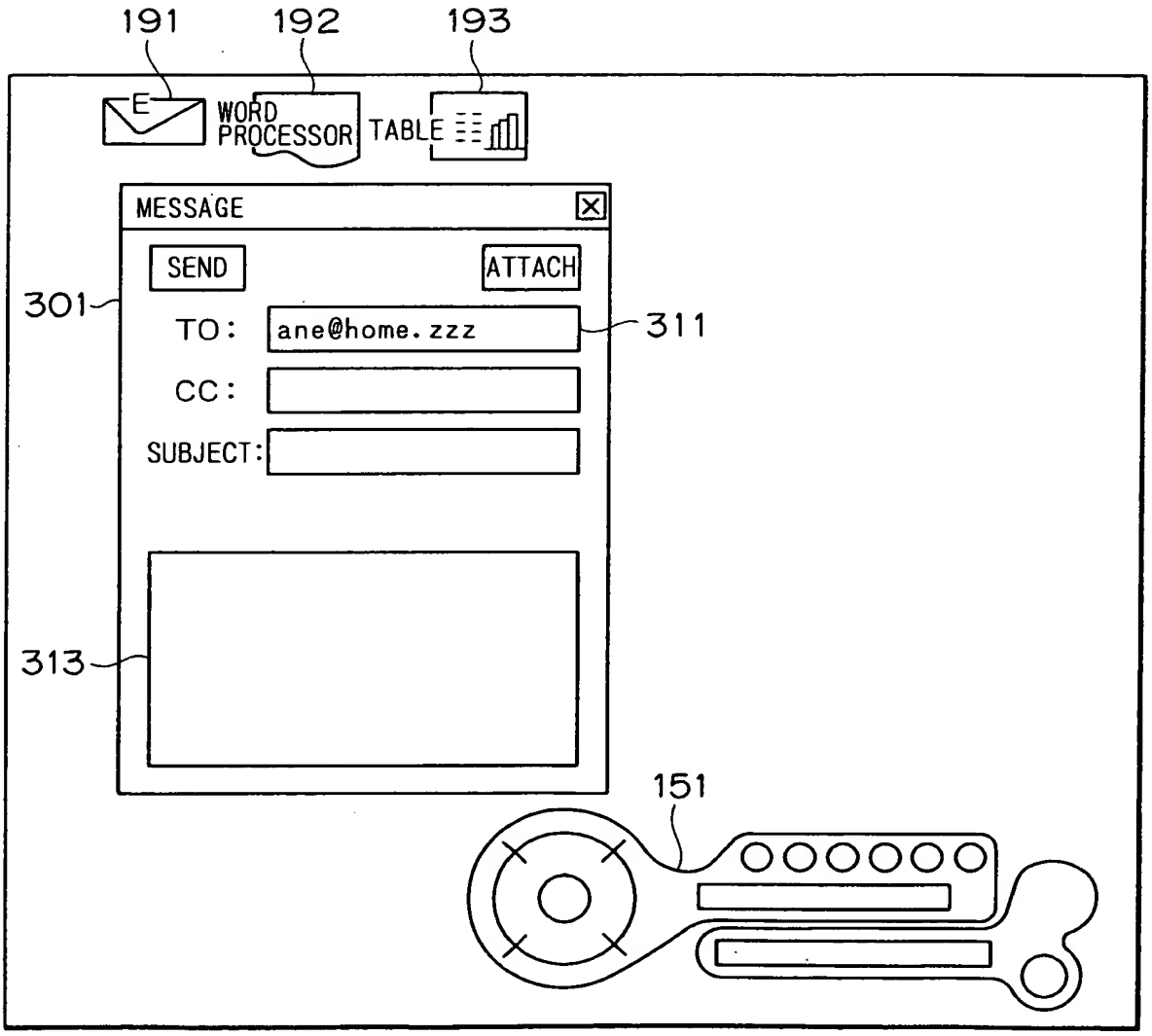

191
192
193
E
WORD PROCESSOR
TABLE
MESSAGE
SEND
ATTACH
301
TO:
ane@home.zzz
311
CC:
SUBJECT:
313
151

FIG.27

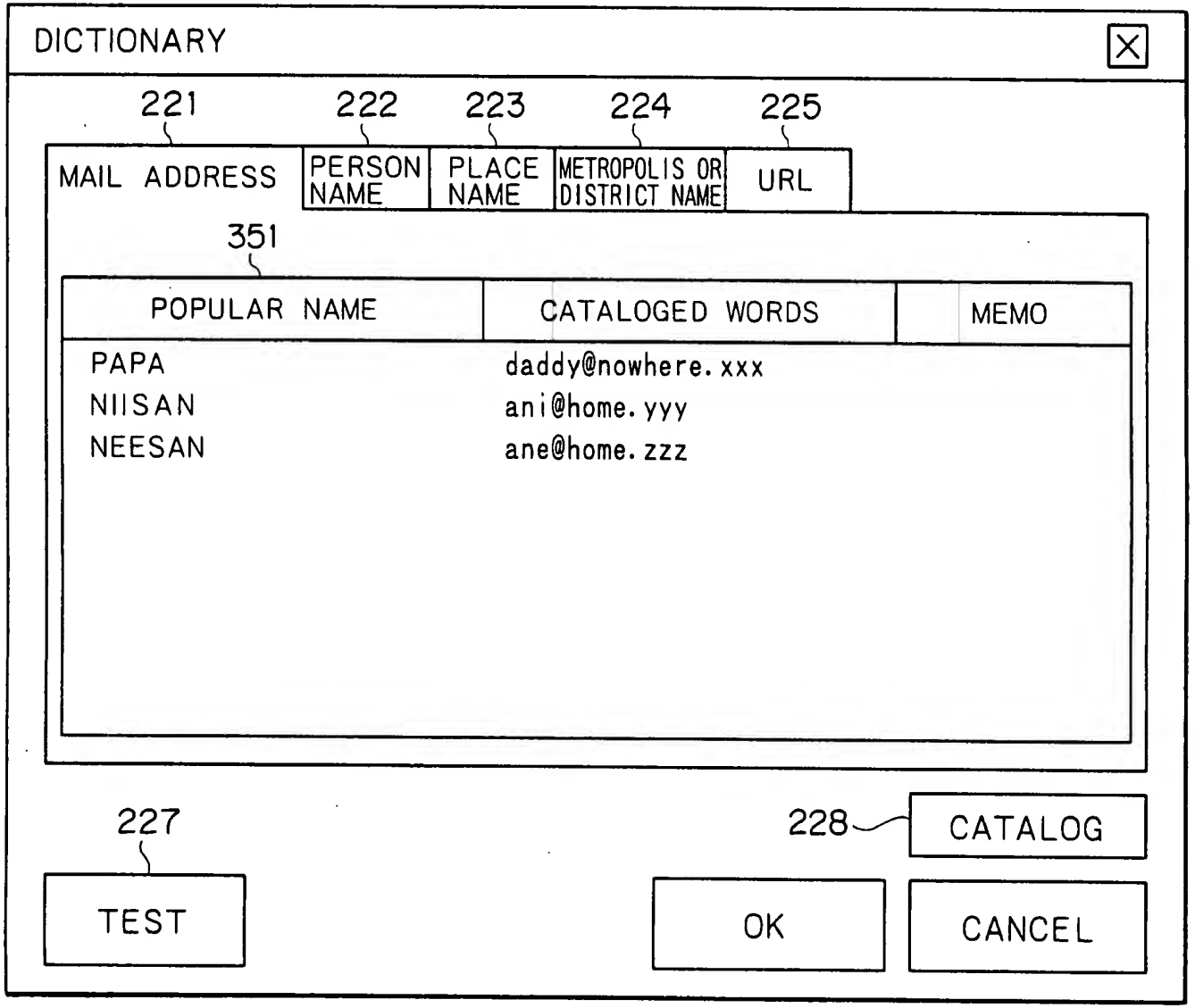
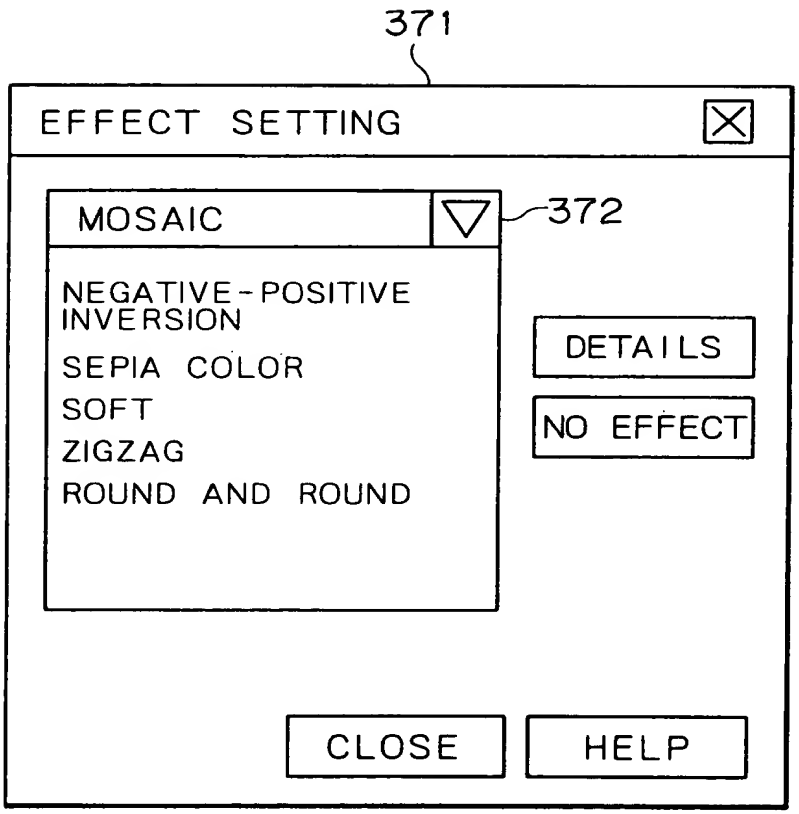

DICTIONARY
221
222
223
224
225
MAIL ADDRESS
PERSON NAME
PLACE NAME
METROPOLIS OR DISTRICT NAME
URL
351
POPULAR NAME
CATALOGED WORDS
MEMO
PAPA
daddy@nowhere.xxx
NIISAN
ani@home.yyy
NEESAN
ane@home.zzz
227
TEST
228
CATALOG
OK
CANCEL

FIG. 28


371
EFFECT SETTING
MOSAIC
372
NEGATIVE-POSITIVE INVERSION
SEPIA COLOR
SOFT
ZIGZAG
ROUND AND ROUND
DETAILS
NO EFFECT
CLOSE
HELP

F I G. 29

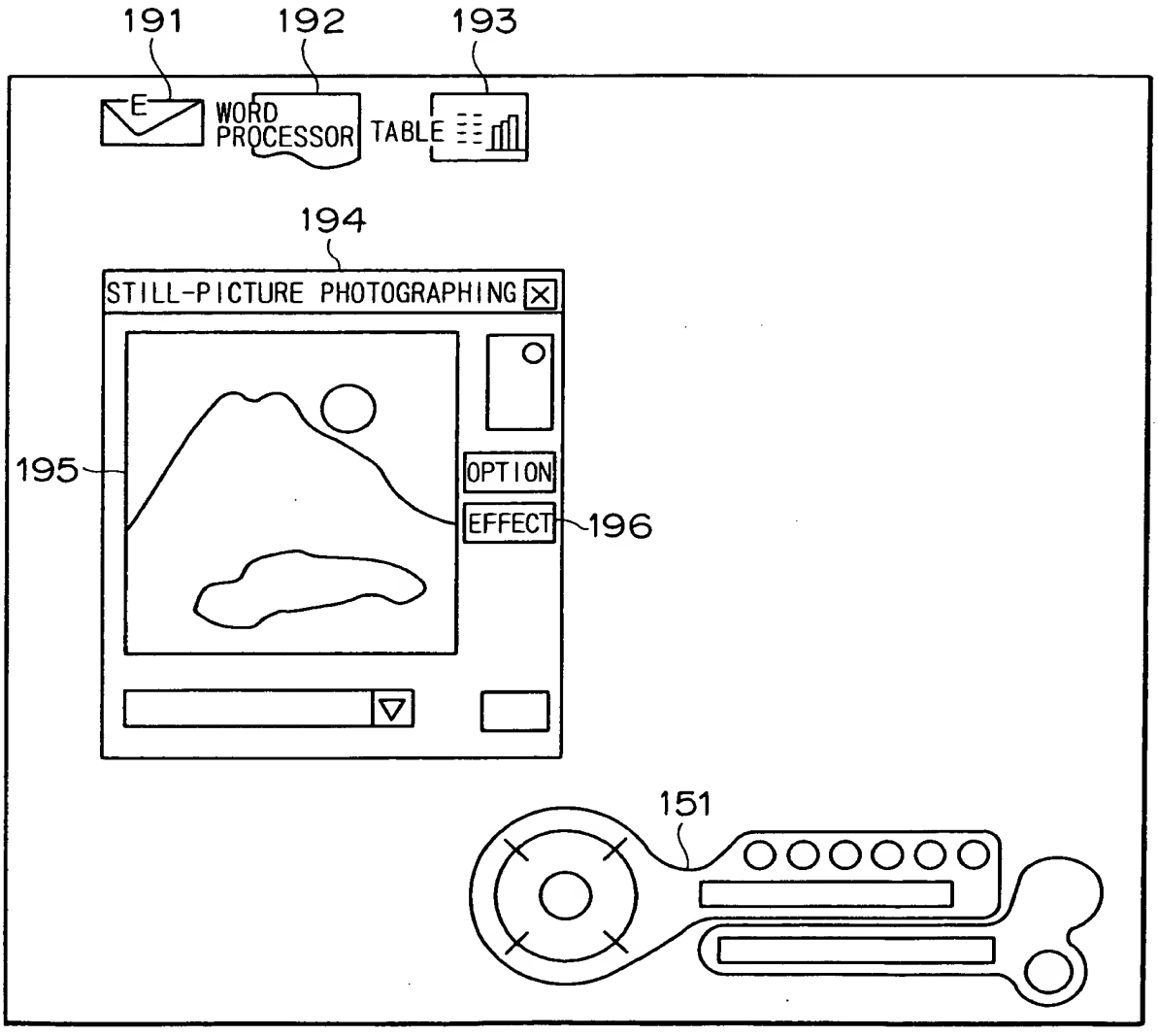

191
192
193
E
WORD PROCESSOR
TABLE
194
STILL-PICTURE PHOTOGRAPHING
195
OPTION
EFFECT
196
151

FIG. 30

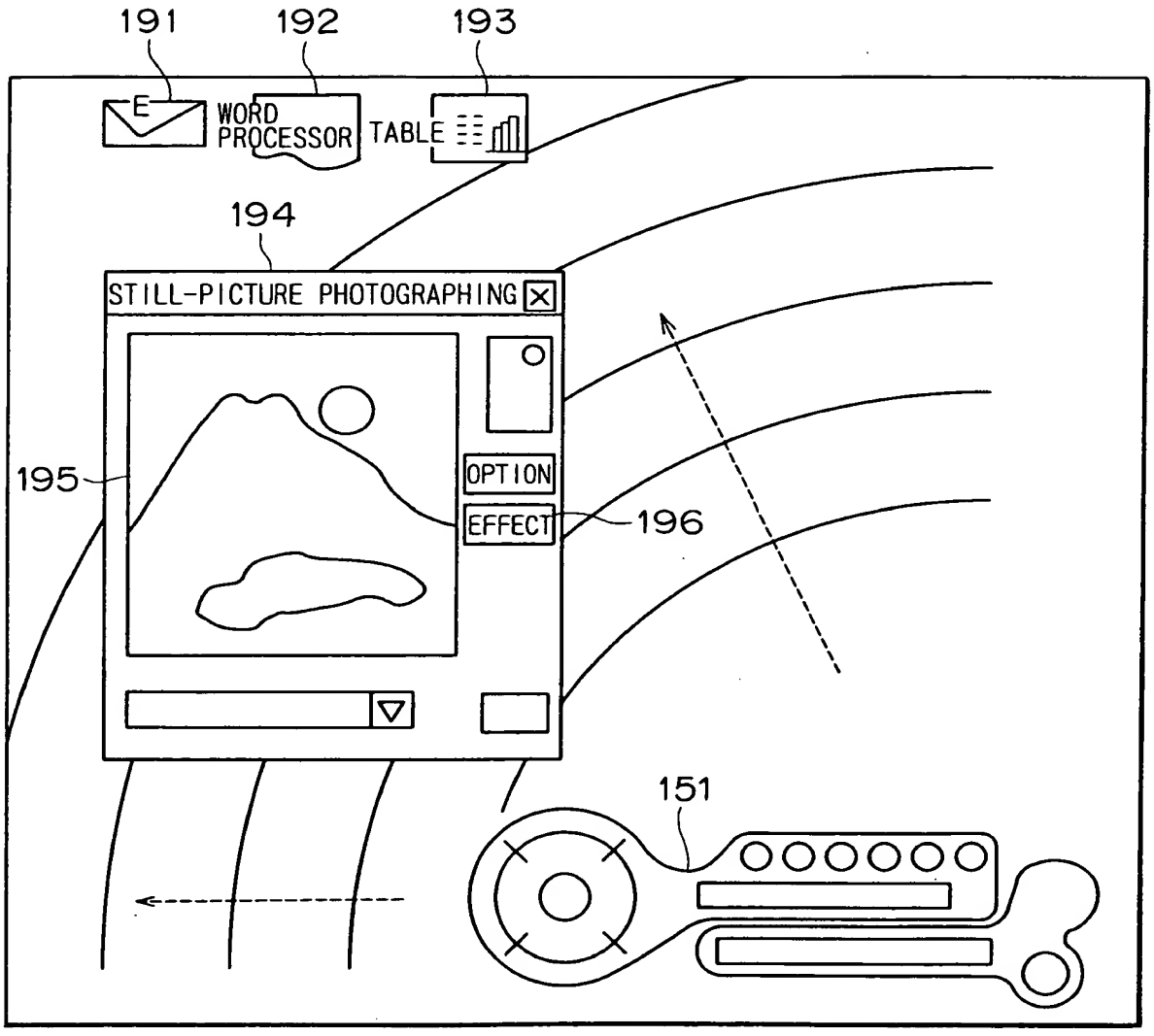

191
192
193
E
WORD PROCESSOR
TABLE
194
STILL-PICTURE PHOTOGRAPHING
195
OPTION
EFFECT
196
151

FIG. 31

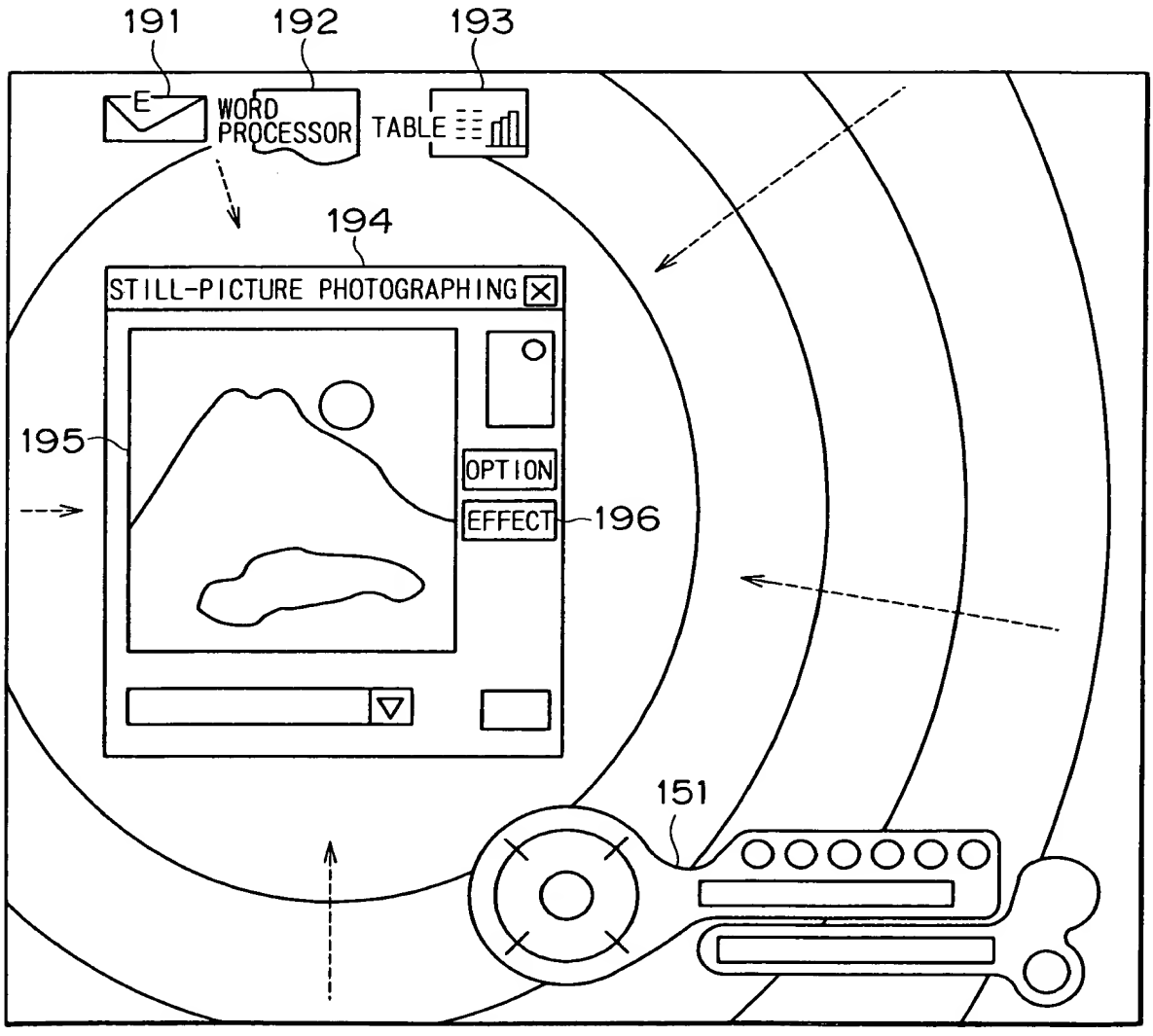

191
192
193
E
WORD PROCESSOR
TABLE
194
STILL-PICTURE PHOTOGRAPHING
195
OPTION
EFFECT
196
151

FIG. 32

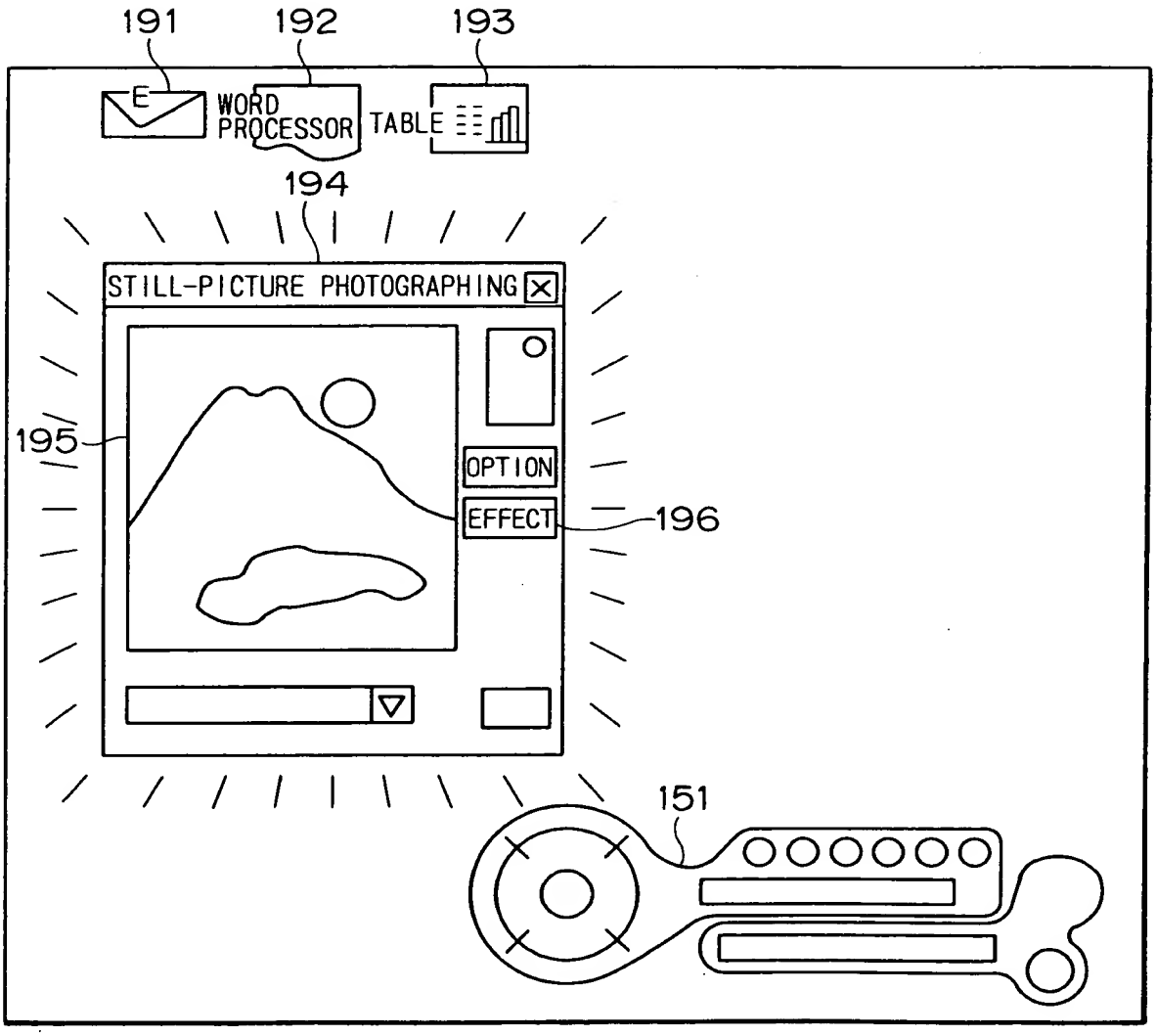

191
192
193
E
WORD PROCESSOR
TABLE
194
STILL-PICTURE PHOTOGRAPHING
195
OPTION
EFFECT
196
151

FIG. 33

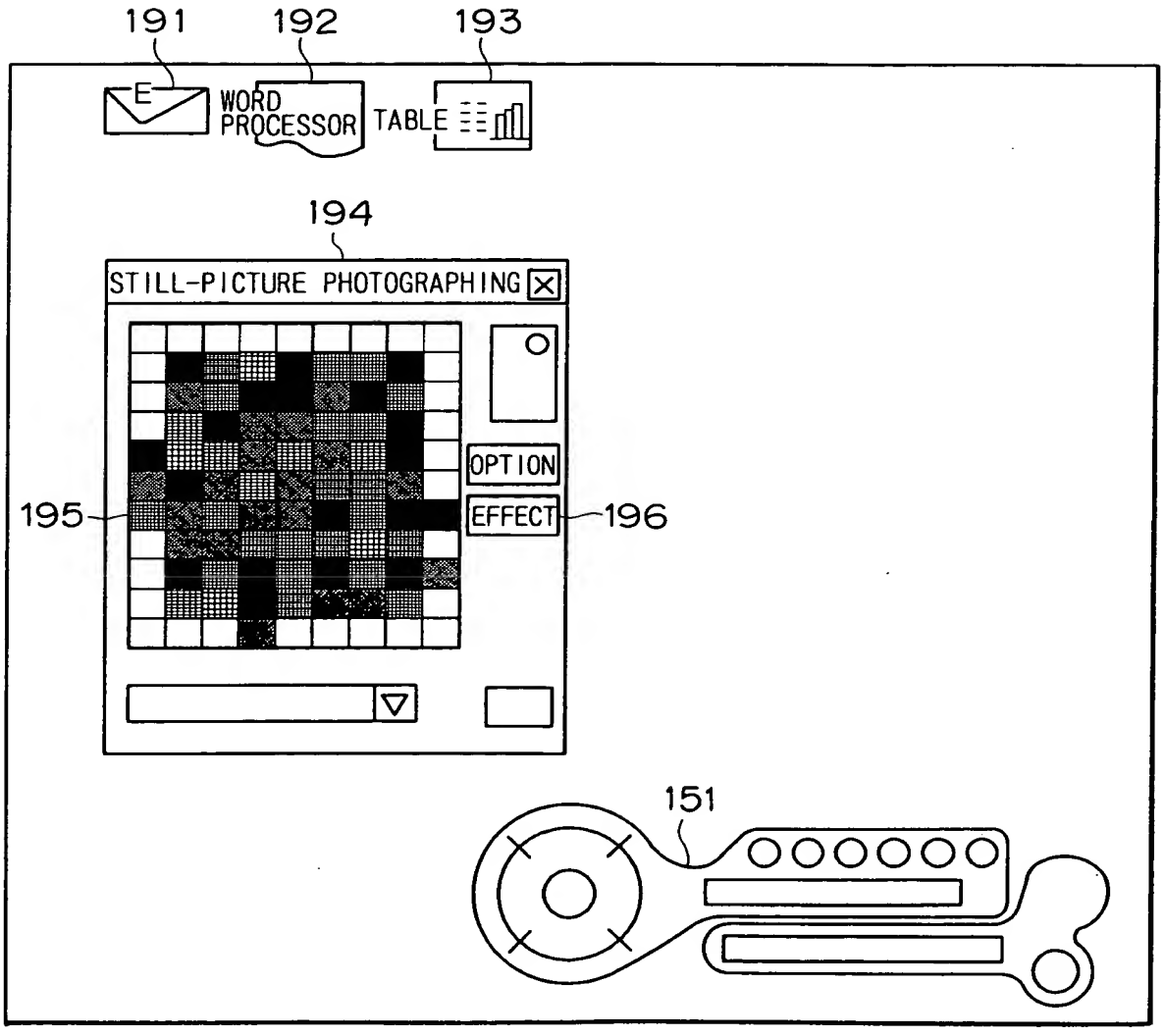

191
192
193
E
WORD PROCESSOR
TABLE
194
STILL-PICTURE PHOTOGRAPHING
OPTION
EFFECT
195
196
151

FIG. 34

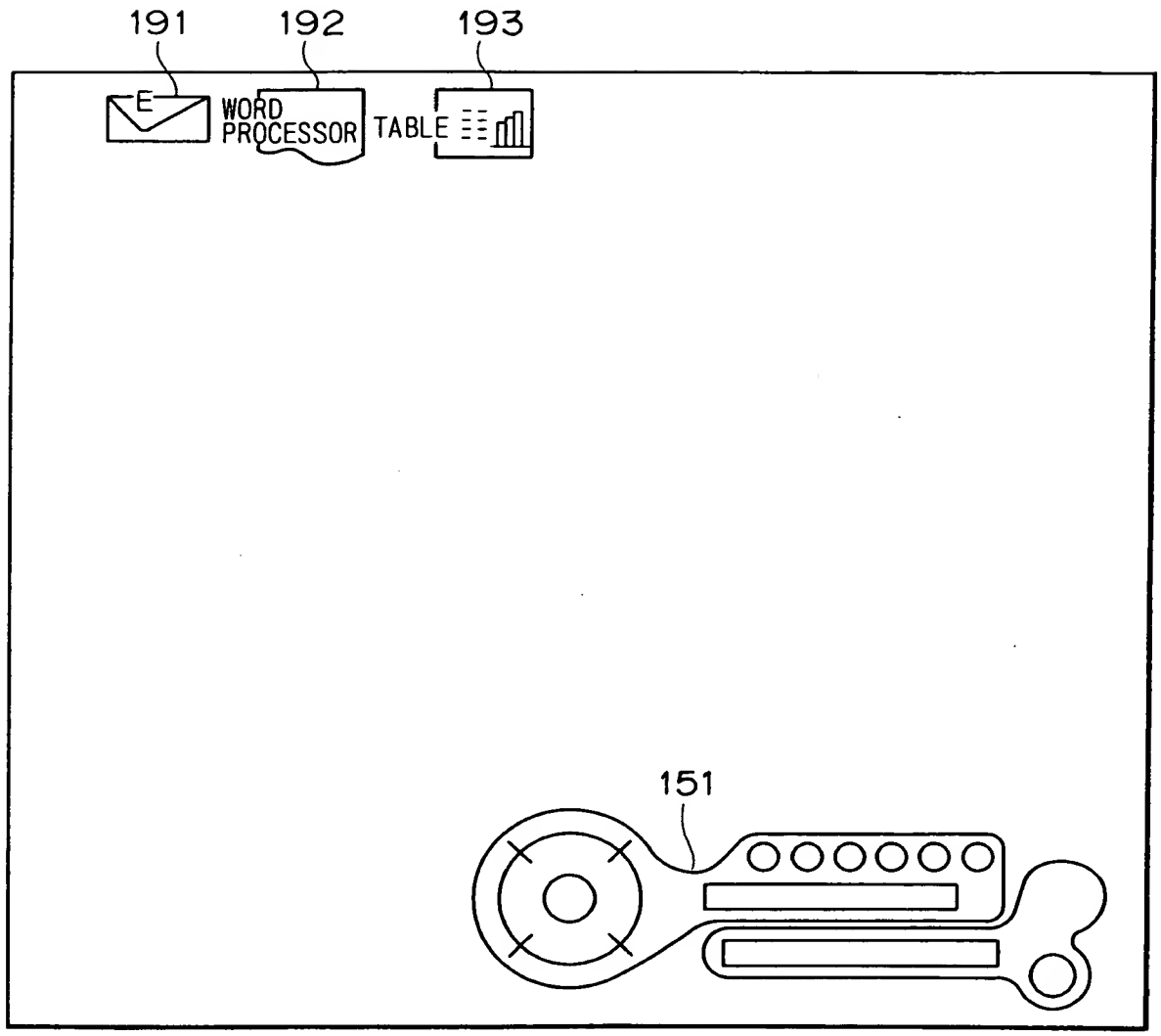


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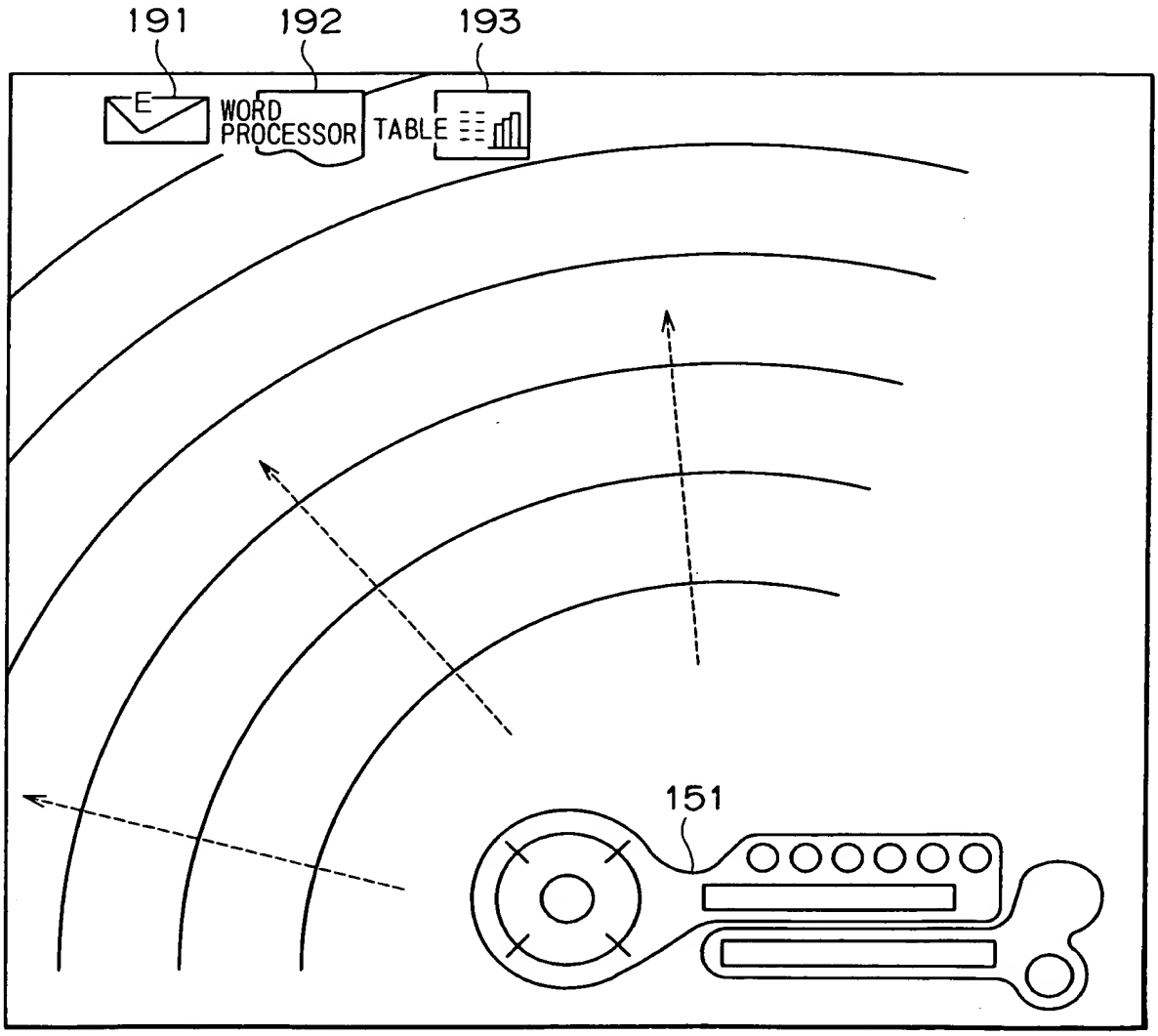
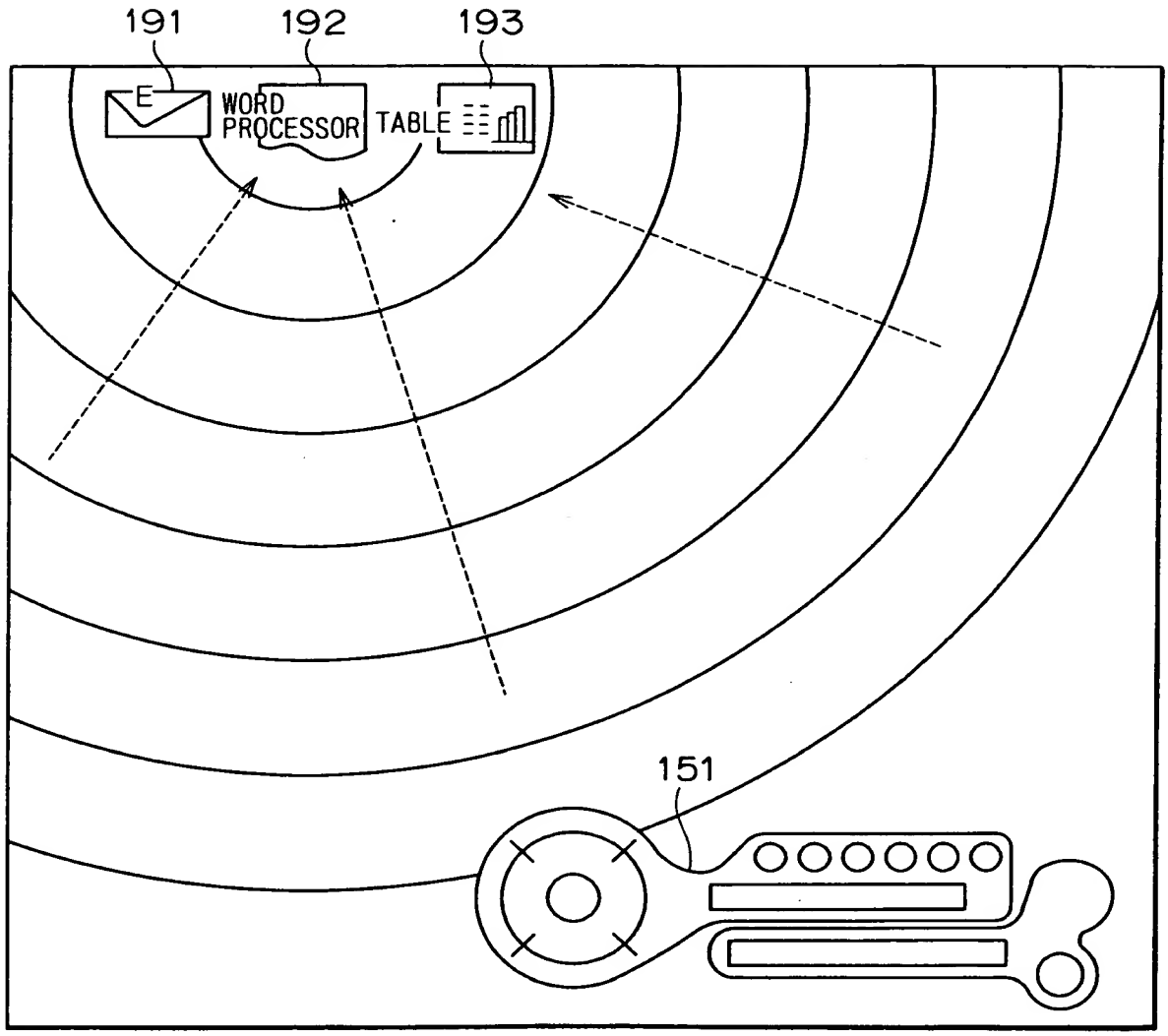
FIG. 35



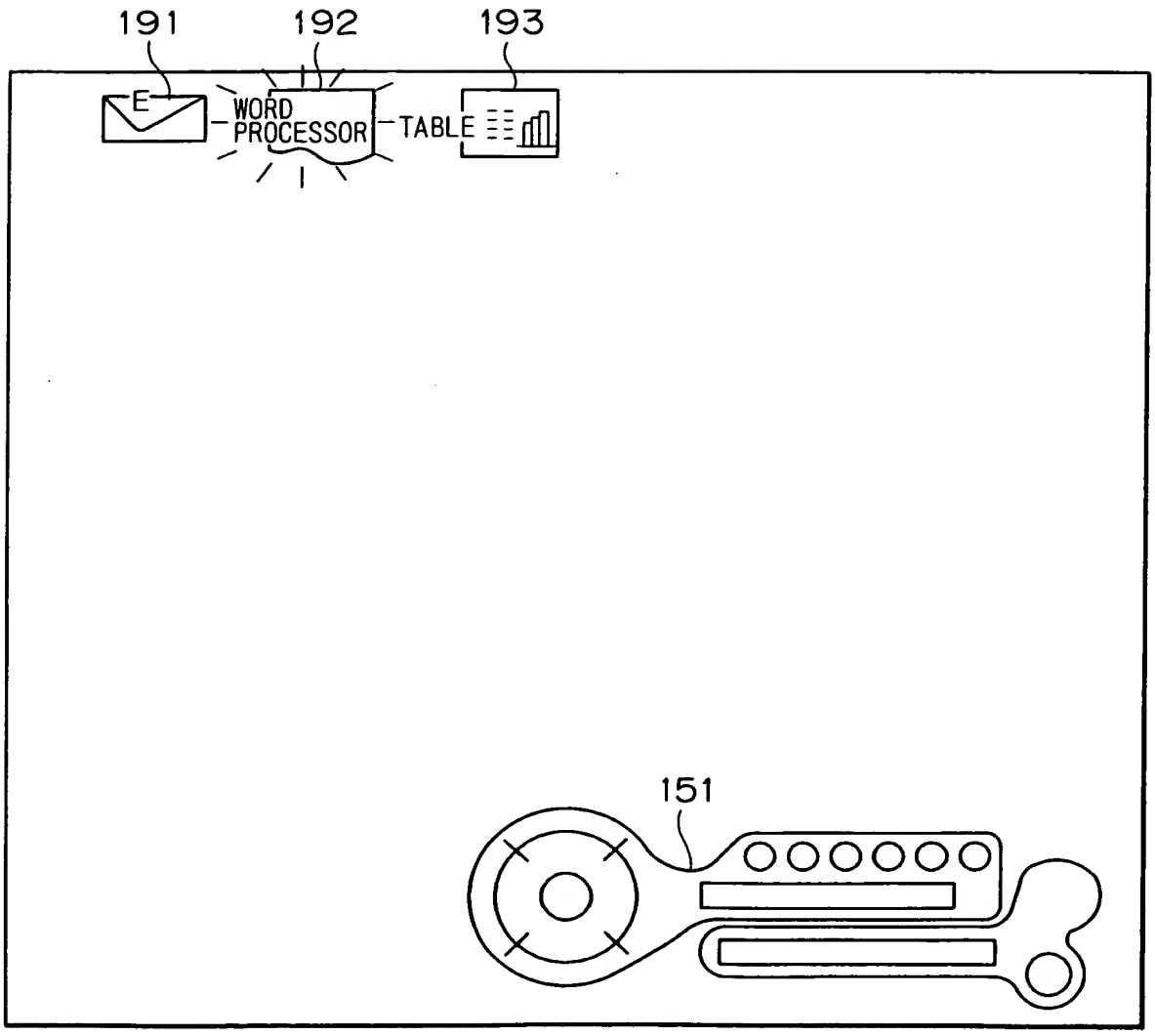
0056885-083500

FIG. 36



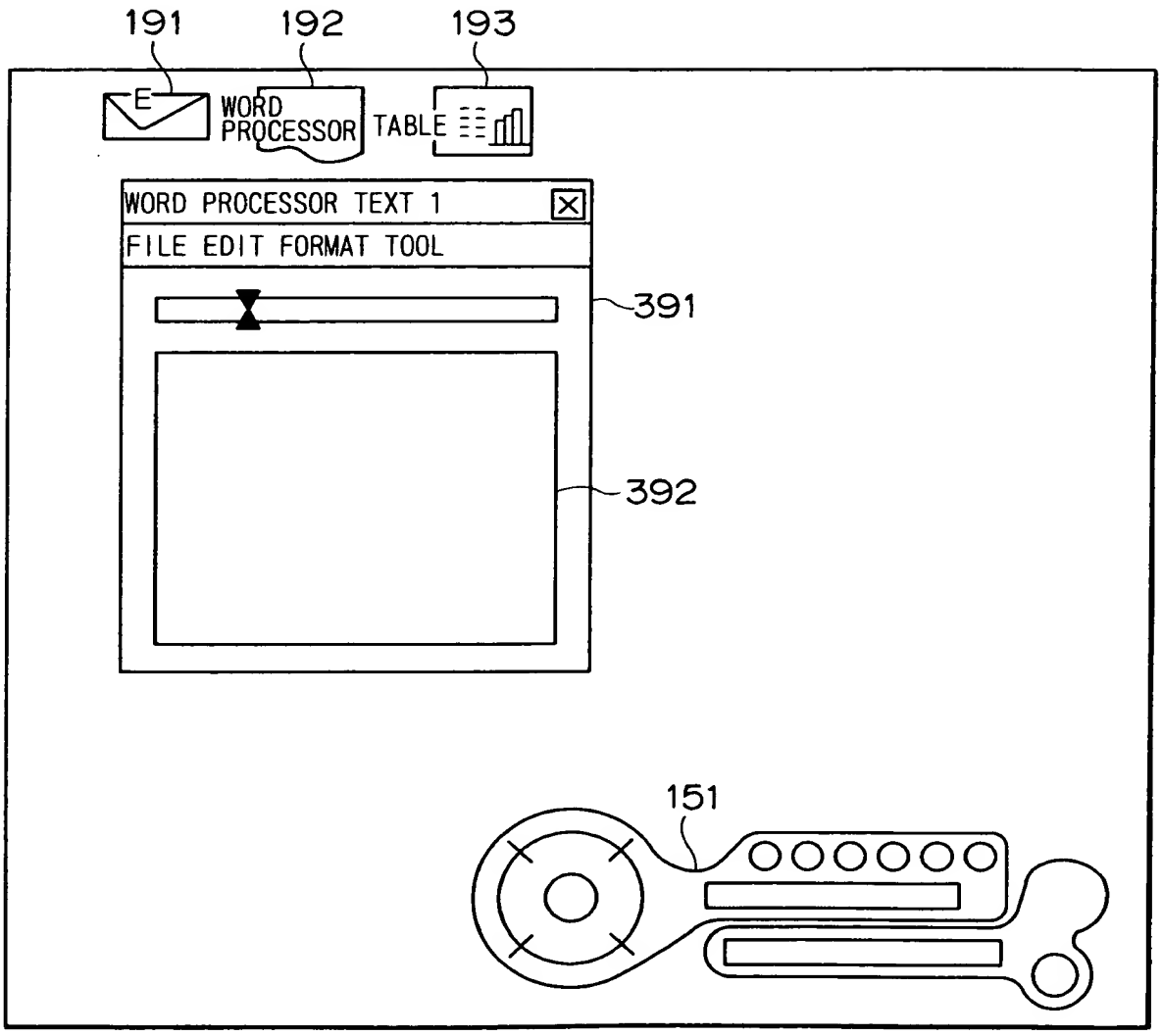
0954886 - 082500

FIG. 37



0056409-0056500

FIG. 38


191
192
193
E
WORD PROCESSOR
TABLE
WORD PROCESSOR TEXT 1
FILE EDIT FORMAT TOOL
391
392
151

0054805 - 0825008

FIG. 39

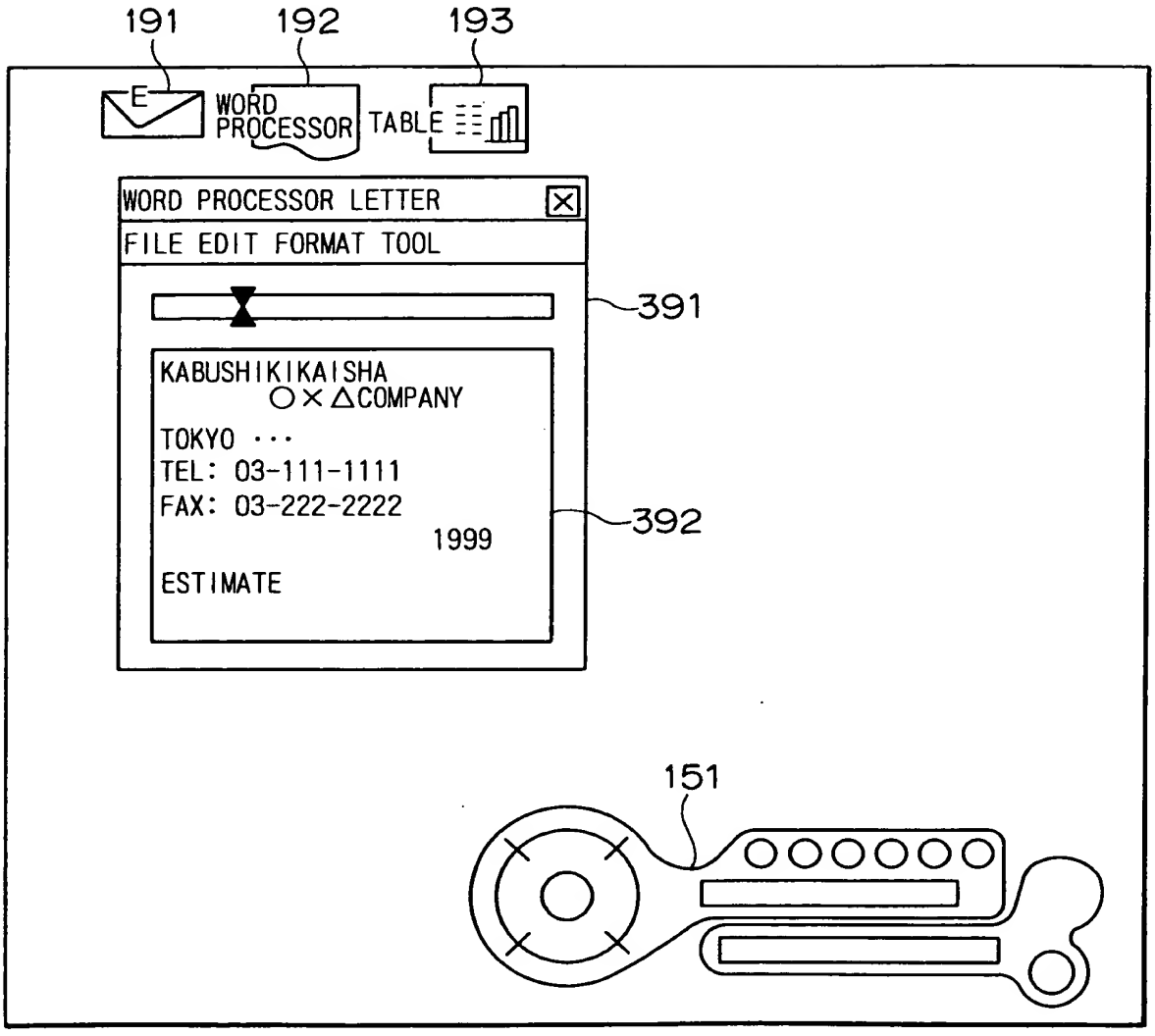
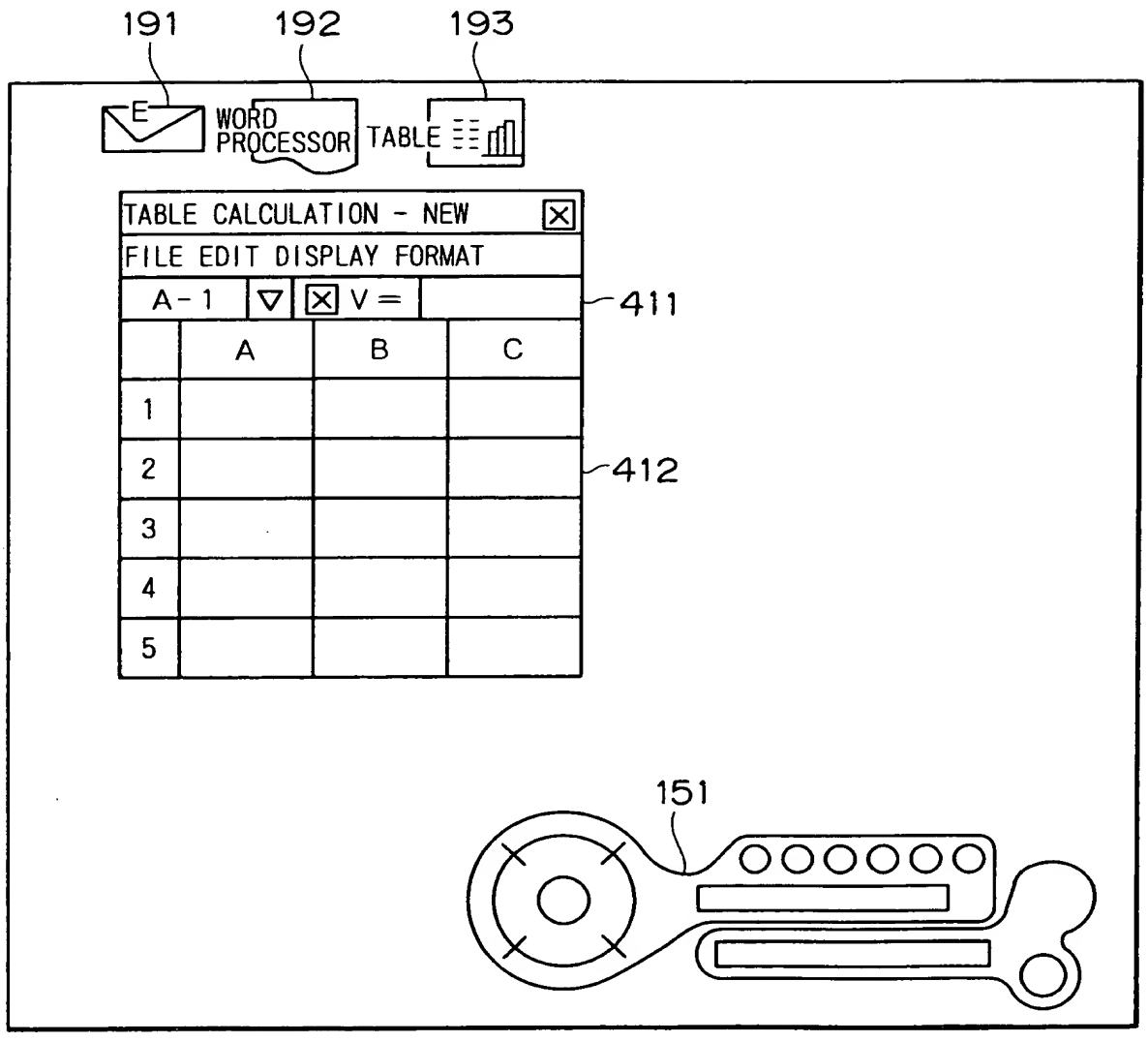
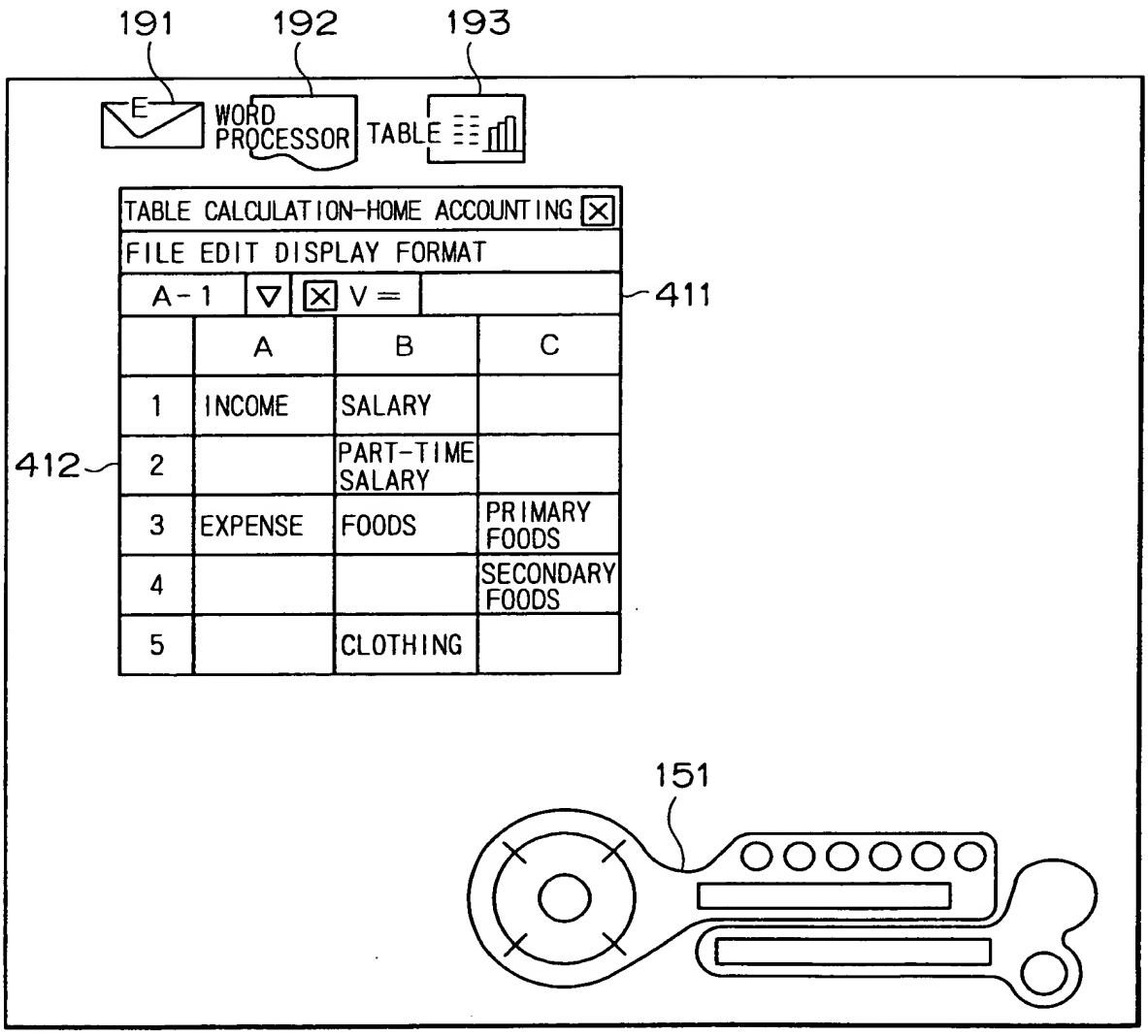


FIG.40


191
192
193
E
WORD PROCESSOR
TABLE
TABLE CALCULATION - NEW
FILE EDIT DISPLAY FORMAT
A-1
V=
411
A
B
C
1
2
3
4
5
412
151

0954853-082500

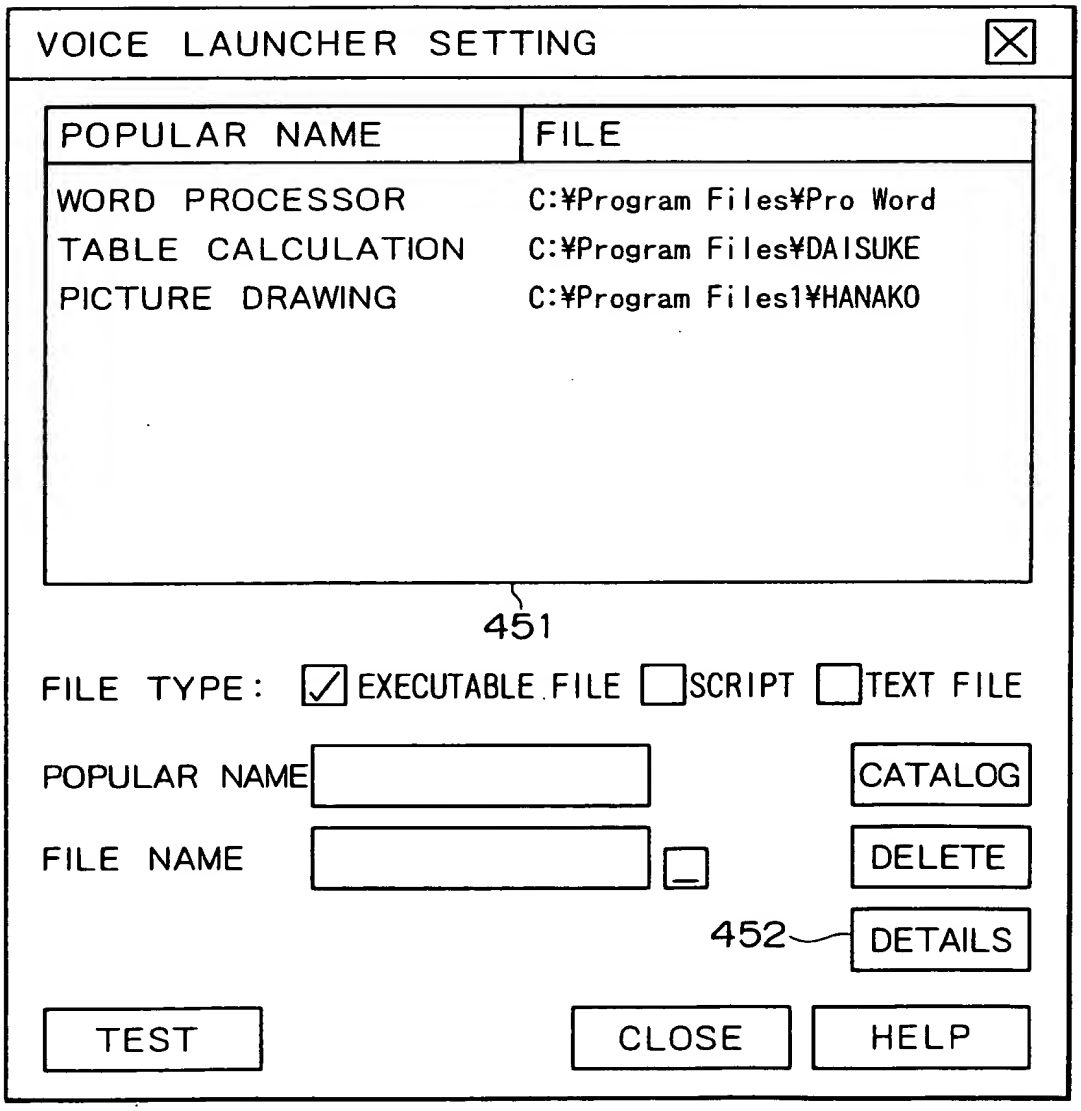
FIG.41



	A	B	C
1	INCOME	SALARY	
2		PART-TIME SALARY	
3	EXPENSE	FOODS	PRIMARY FOODS
4			SECONDARY FOODS
5		CLOTHING	

0956803-082500

FIG.42



0050005-050500

FIG. 43

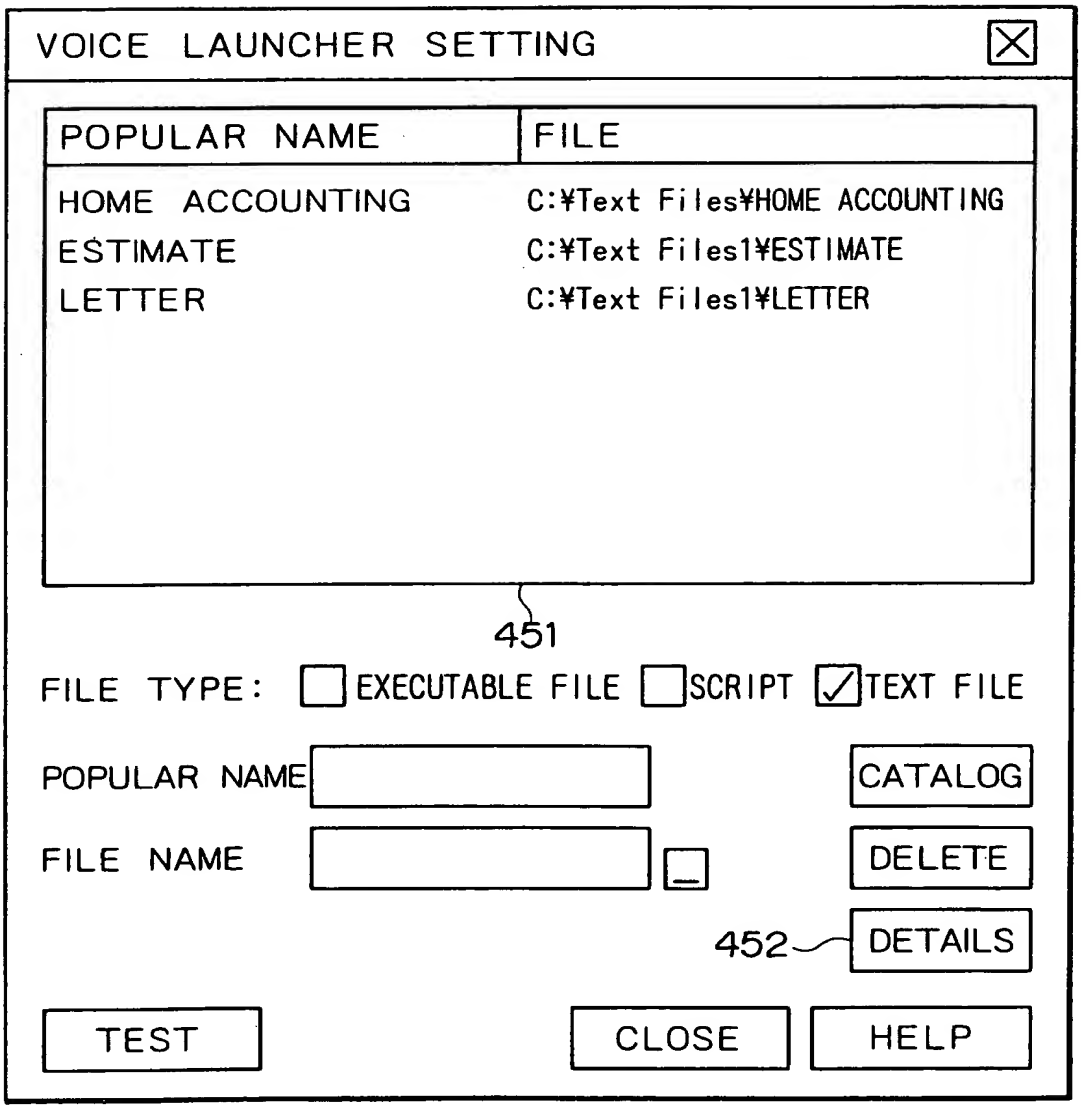
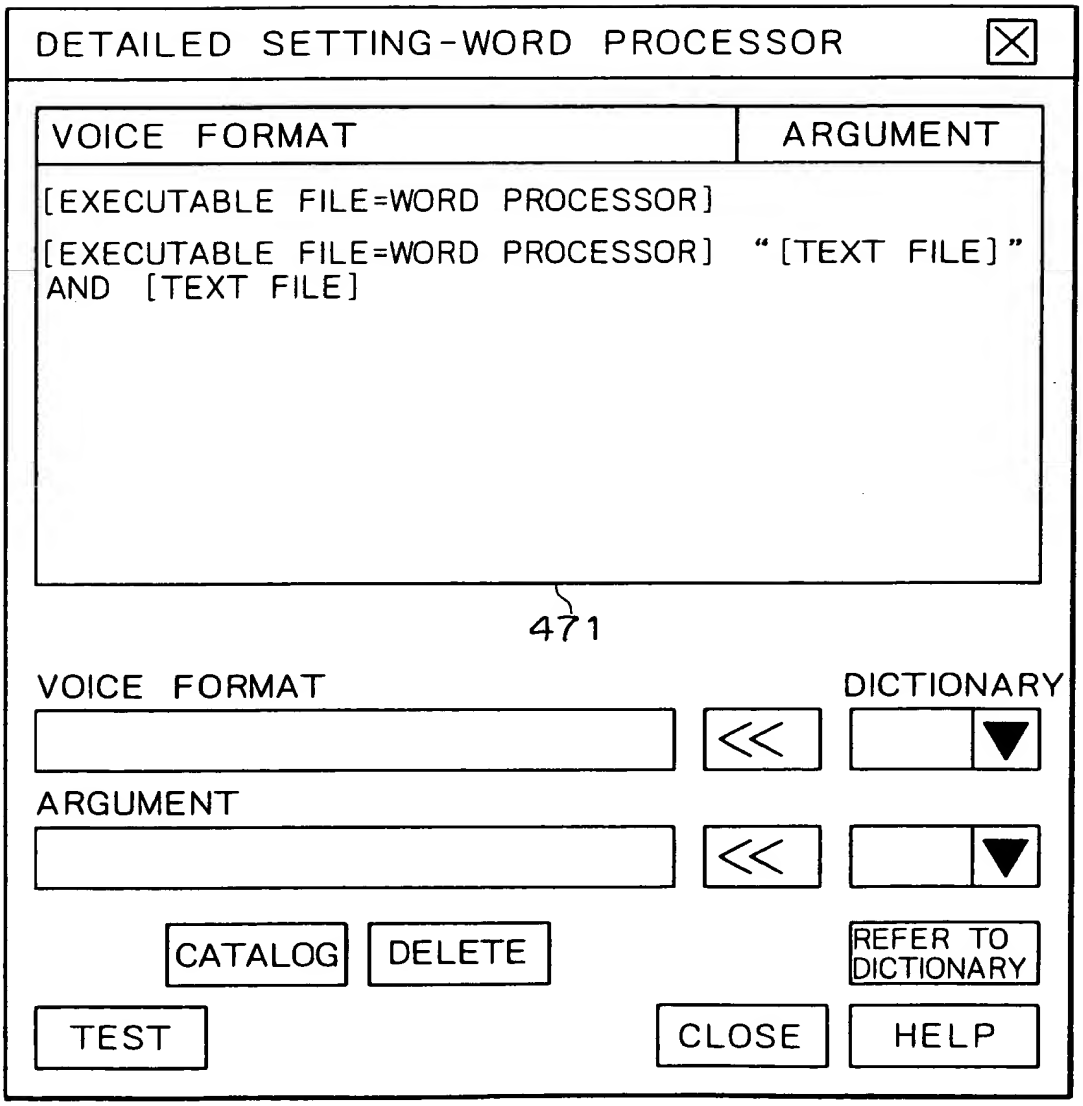
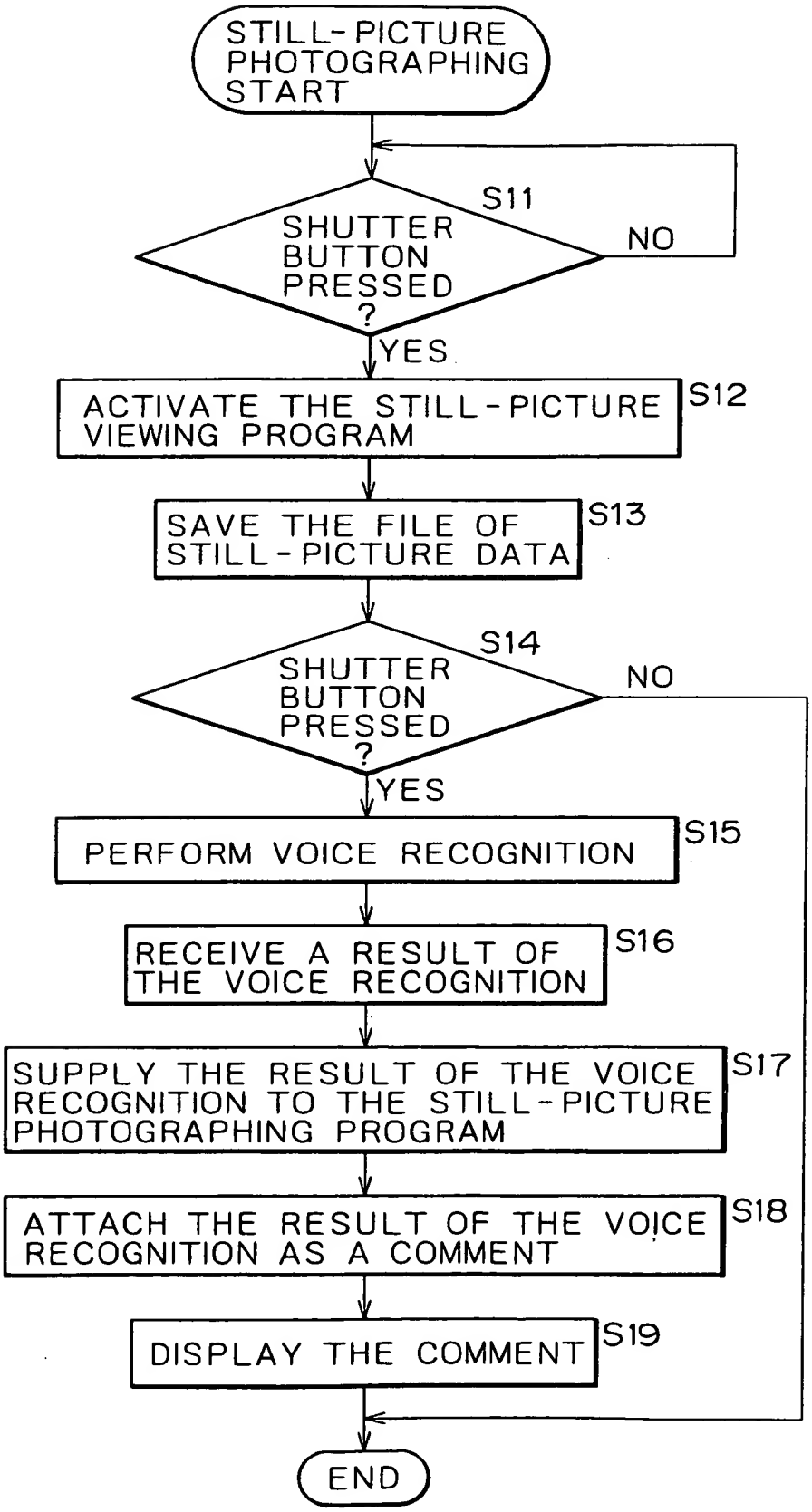


FIG.44



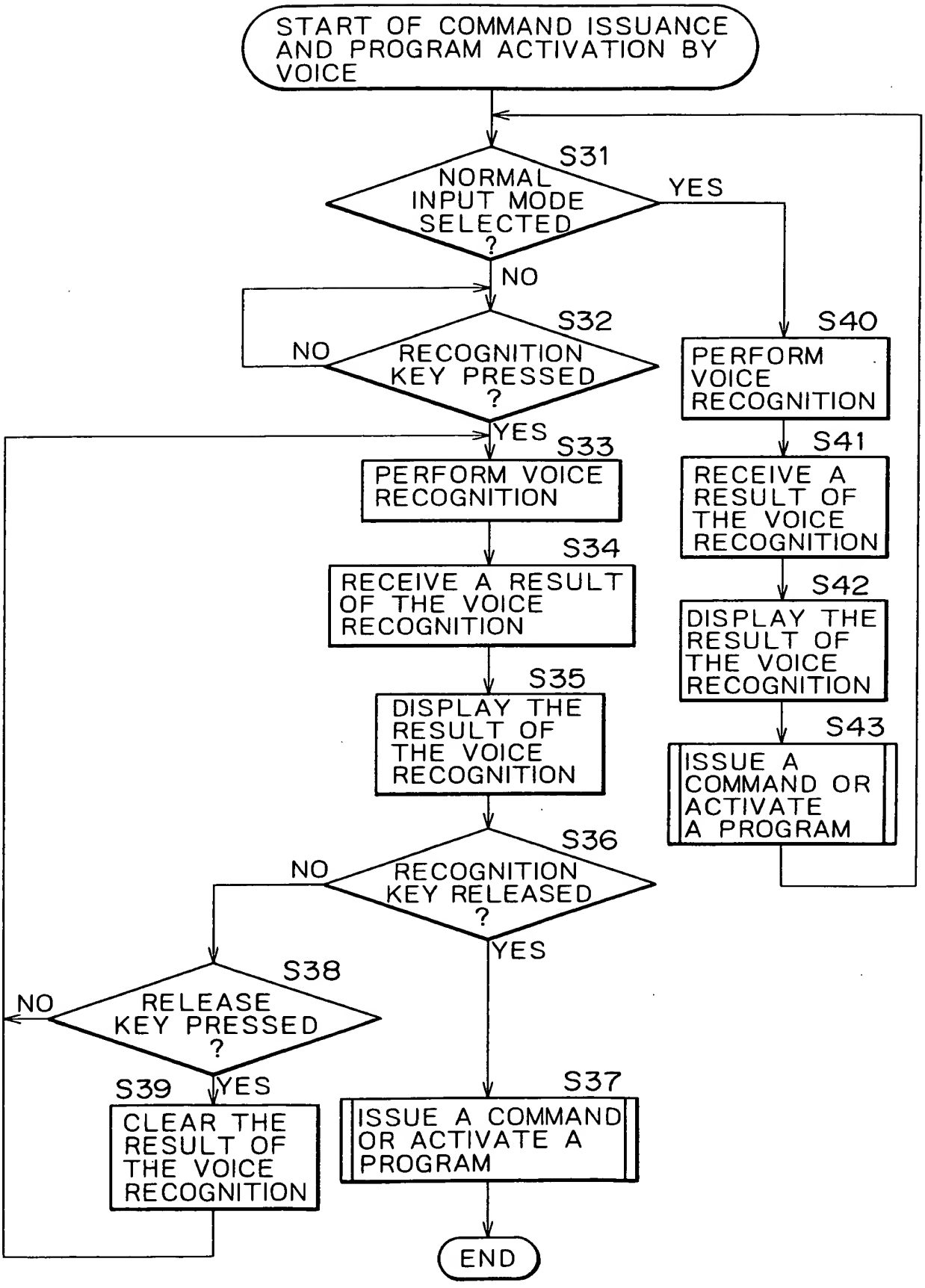
0054865-080500

FIG. 45



0056800 - 0056900

FIG. 46



US 6,965,863 B1

005280"E988h960

FIG.47

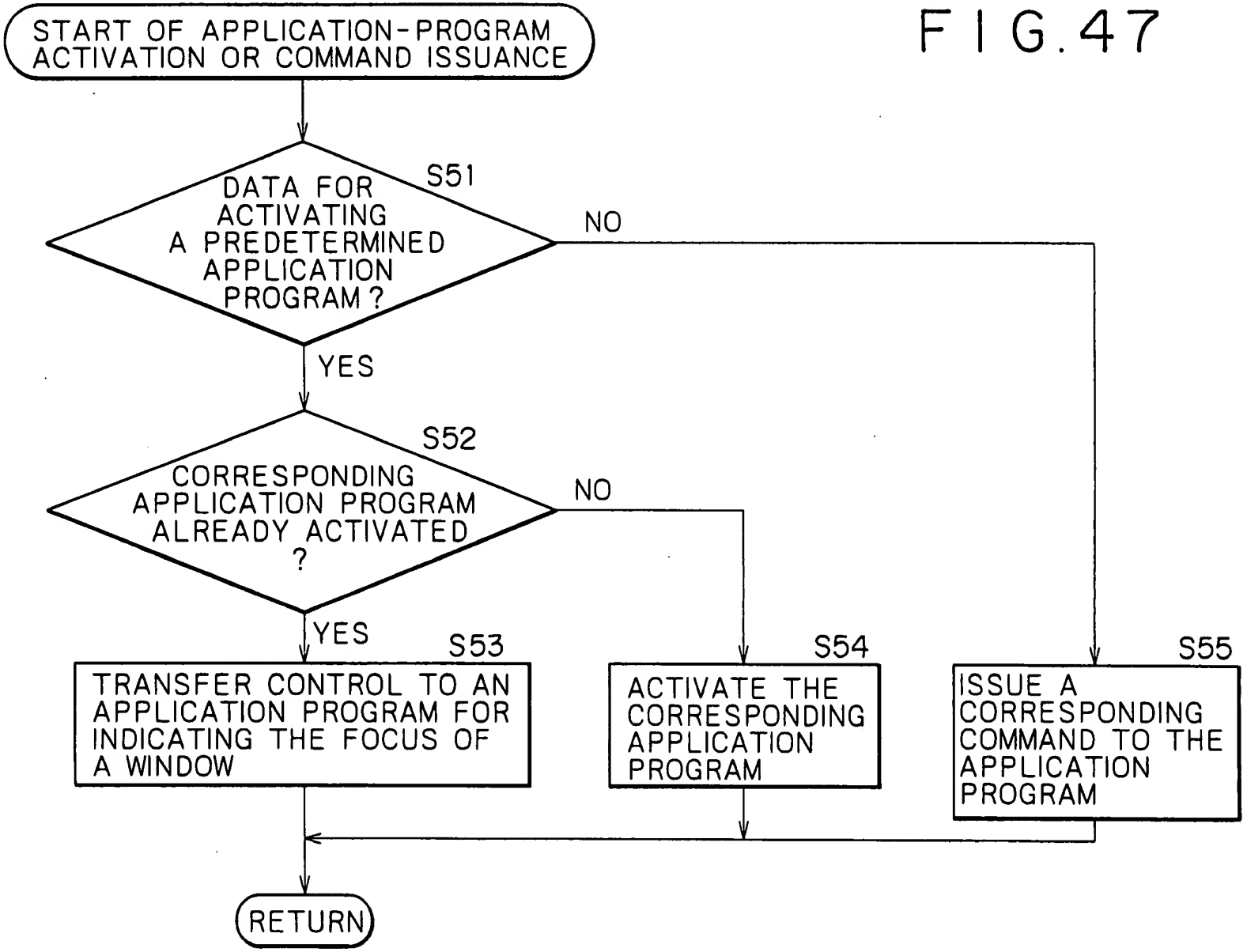
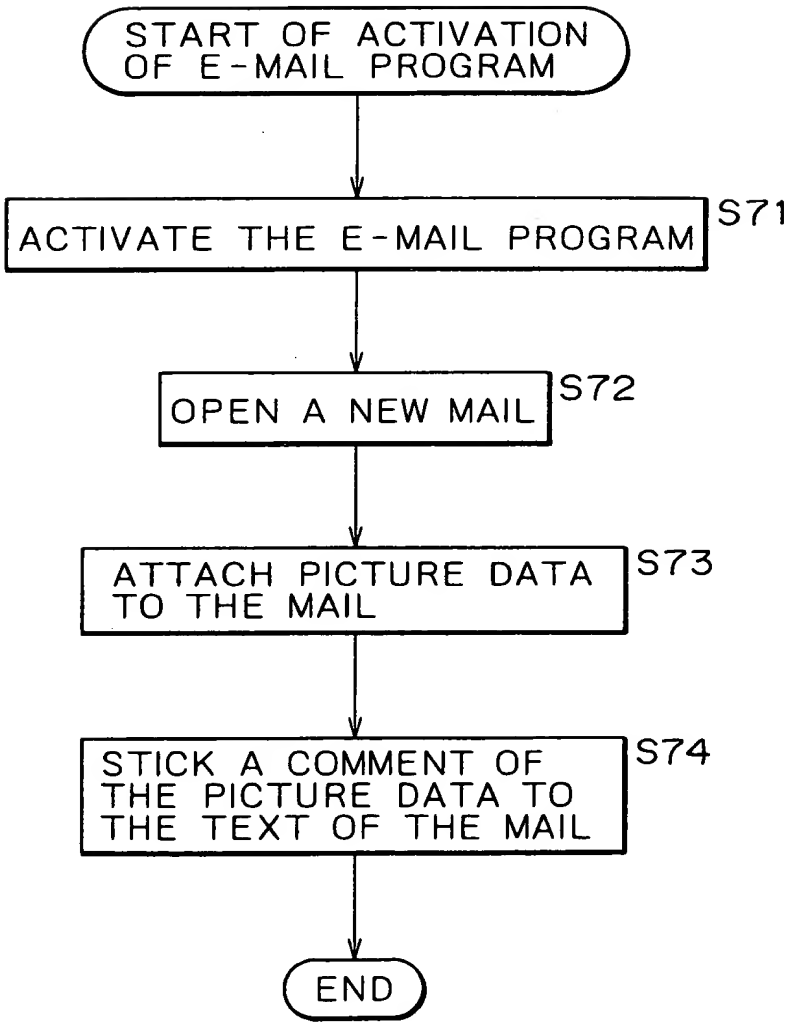


FIG. 48



0954886 - 082500

FIG.49

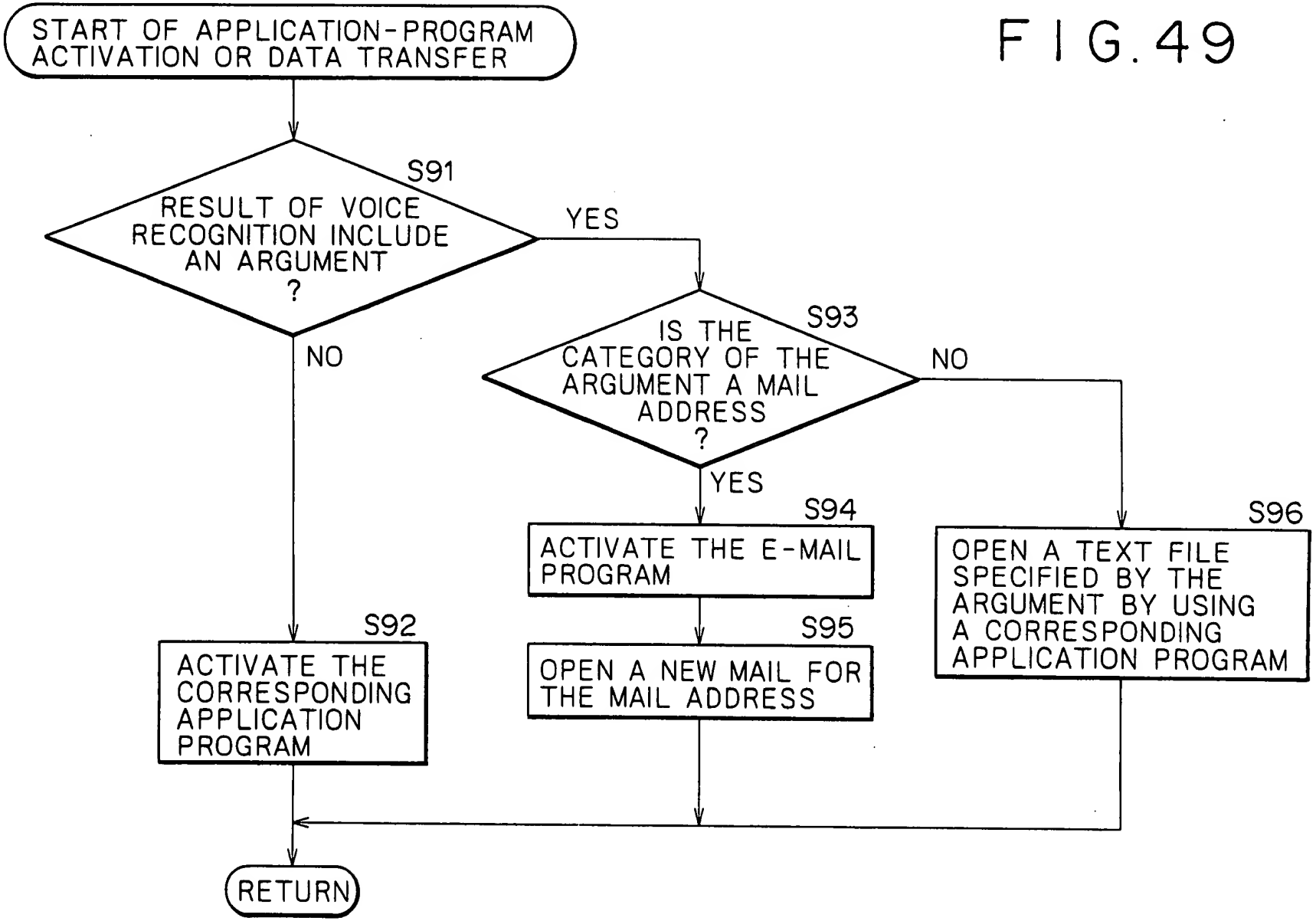

START OF APPLICATION-PROGRAM ACTIVATION OR DATA TRANSFER
S91
RESULT OF VOICE RECOGNITION INCLUDE AN ARGUMENT ?
YES
NO
S93
IS THE CATEGORY OF THE ARGUMENT A MAIL ADDRESS ?
NO
YES
S94
ACTIVATE THE E-MAIL PROGRAM
S96
OPEN A TEXT FILE SPECIFIED BY THE ARGUMENT BY USING A CORRESPONDING APPLICATION PROGRAM
S92
ACTIVATE THE CORRESPONDING APPLICATION PROGRAM
S95
OPEN A NEW MAIL FOR THE MAIL ADDRESS
RETURN

FIG.50

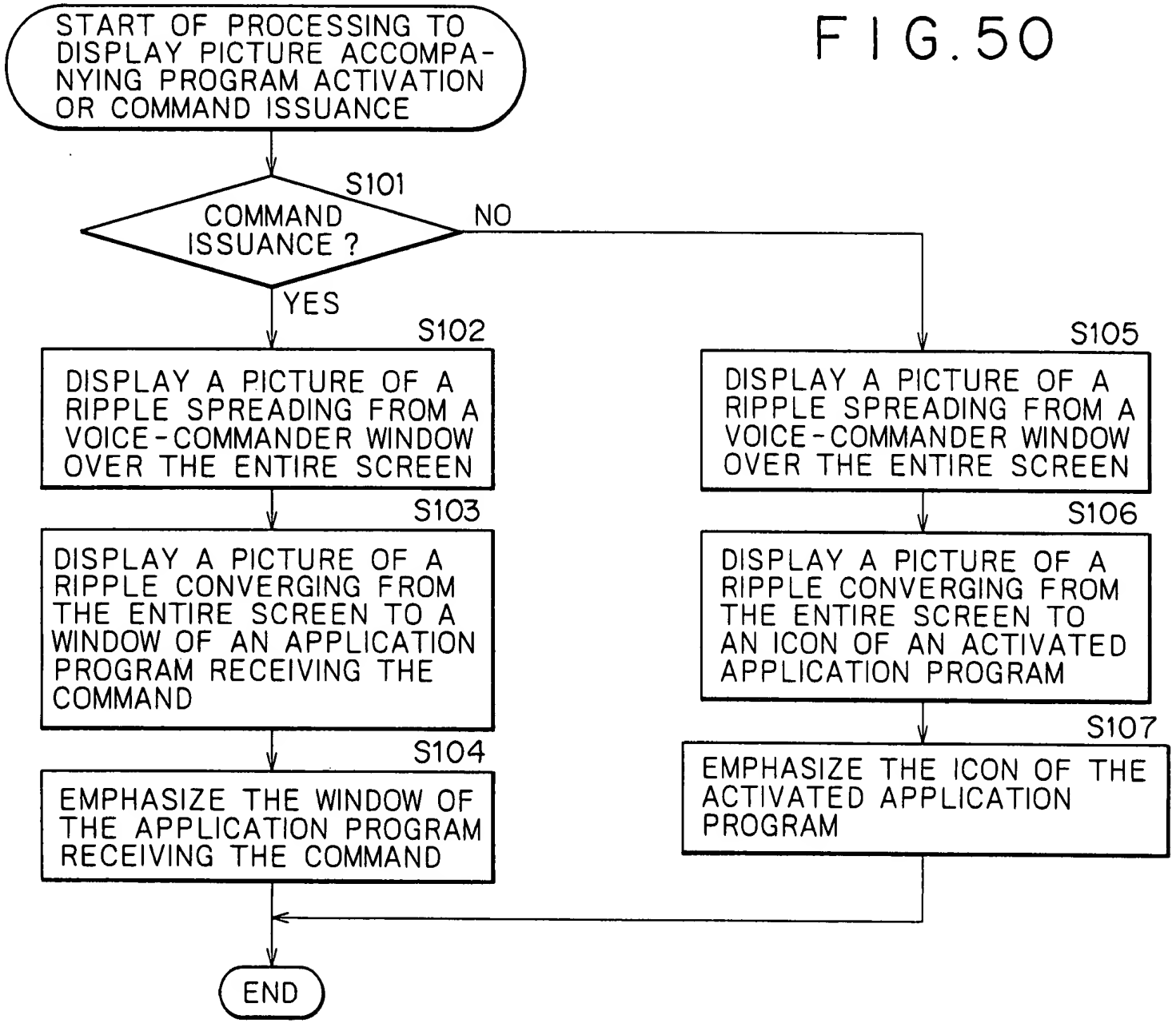
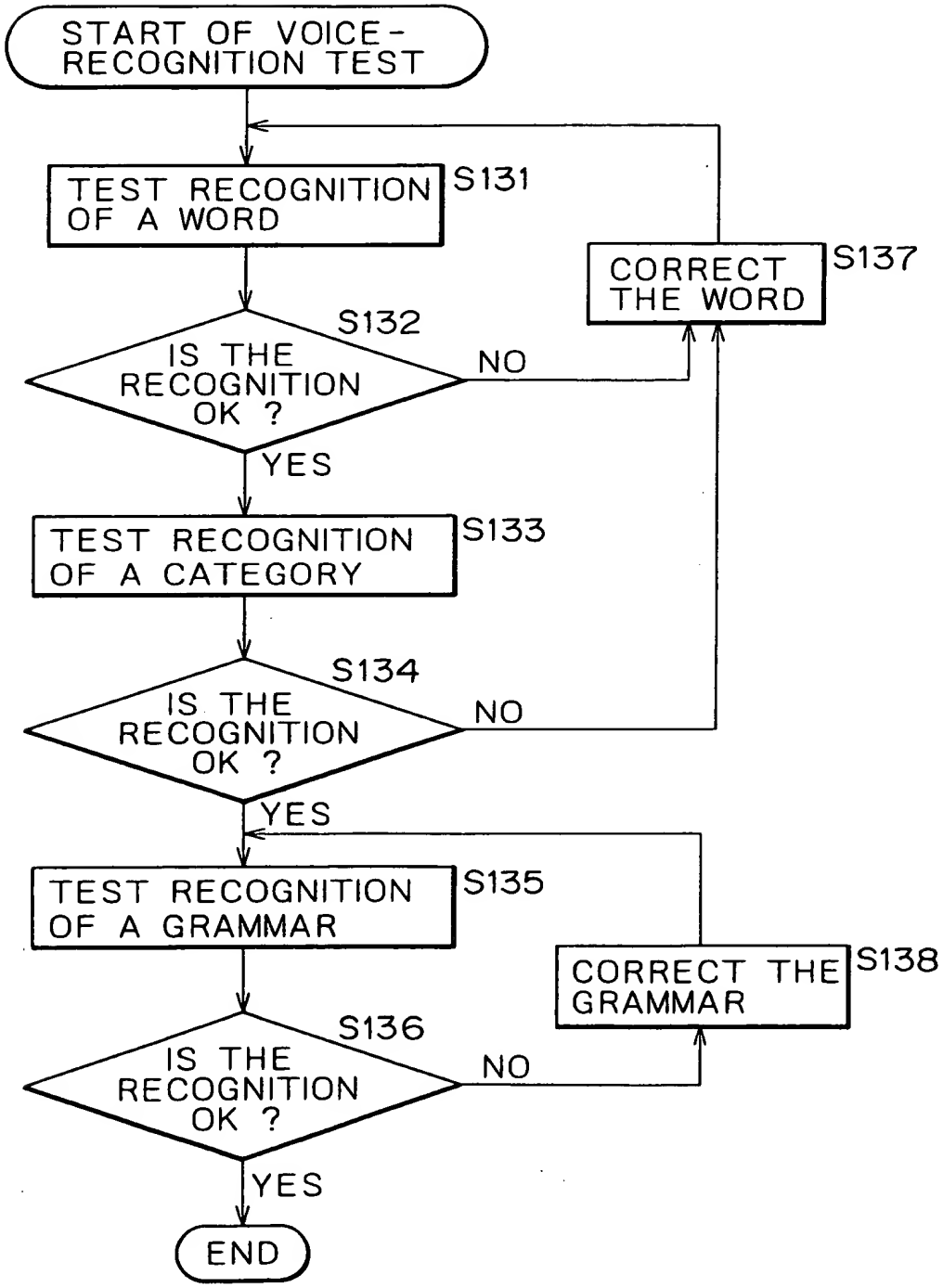

START OF PROCESSING TO DISPLAY PICTURE ACCOMPANYING PROGRAM ACTIVATION OR COMMAND ISSUANCE
S101
COMMAND ISSUANCE ?
NO
YES
S102
DISPLAY A PICTURE OF A RIPPLE SPREADING FROM A VOICE-COMMANDER WINDOW OVER THE ENTIRE SCREEN
S103
DISPLAY A PICTURE OF A RIPPLE CONVERGING FROM THE ENTIRE SCREEN TO A WINDOW OF AN APPLICATION PROGRAM RECEIVING THE COMMAND
S104
EMPHASIZE THE WINDOW OF THE APPLICATION PROGRAM RECEIVING THE COMMAND
S105
DISPLAY A PICTURE OF A RIPPLE SPREADING FROM A VOICE-COMMANDER WINDOW OVER THE ENTIRE SCREEN
S106
DISPLAY A PICTURE OF A RIPPLE CONVERGING FROM THE ENTIRE SCREEN TO AN ICON OF AN ACTIVATED APPLICATION PROGRAM
S107
EMPHASIZE THE ICON OF THE ACTIVATED APPLICATION PROGRAM
END

FIG. 51



0054865-082500

FIG.52

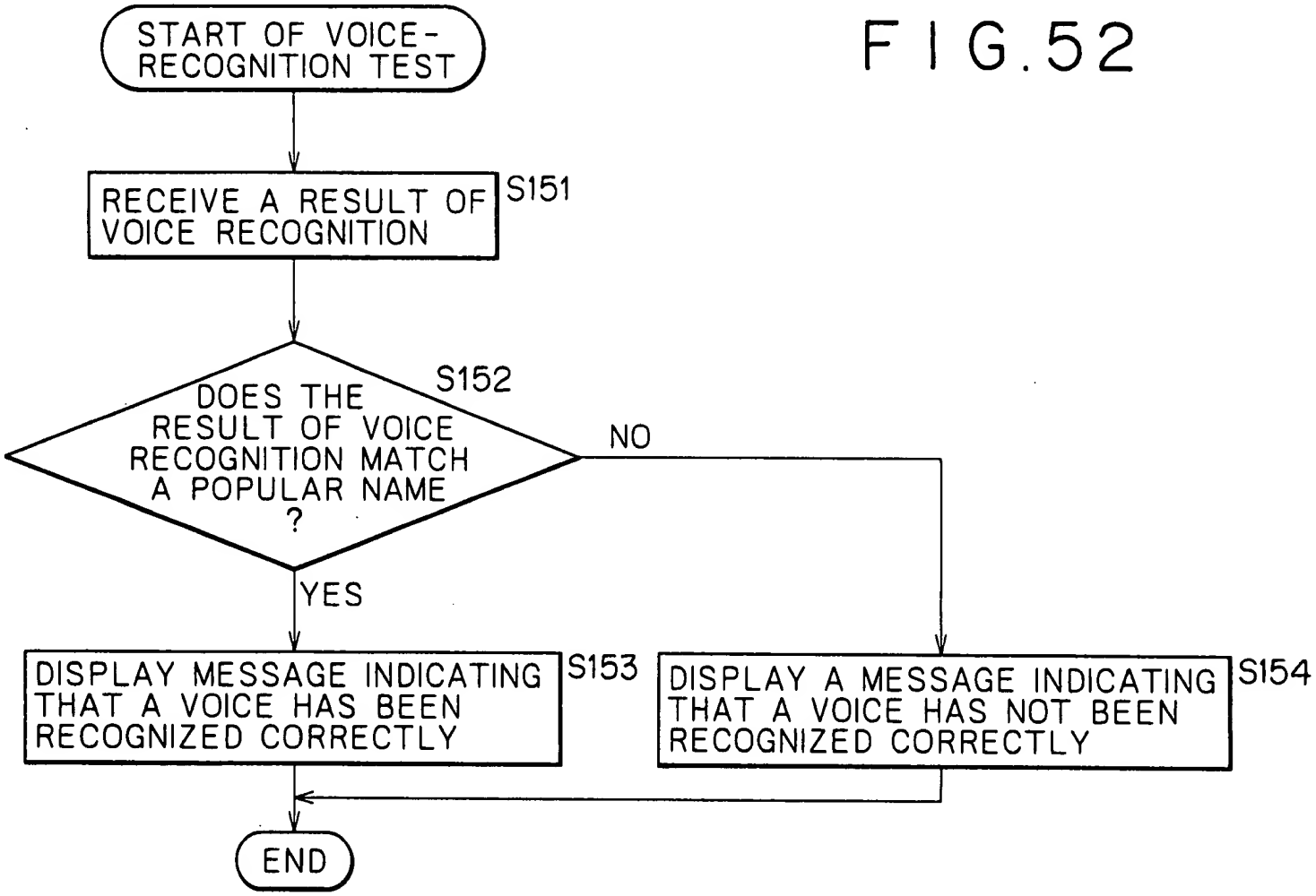

START OF VOICE-RECOGNITION TEST
RECEIVE A RESULT OF VOICE RECOGNITION
S151
DOES THE RESULT OF VOICE RECOGNITION MATCH A POPULAR NAME ?
S152
NO
YES
DISPLAY MESSAGE INDICATING THAT A VOICE HAS BEEN RECOGNIZED CORRECTLY
S153
DISPLAY A MESSAGE INDICATING THAT A VOICE HAS NOT BEEN RECOGNIZED CORRECTLY
S154
END

FIG.53

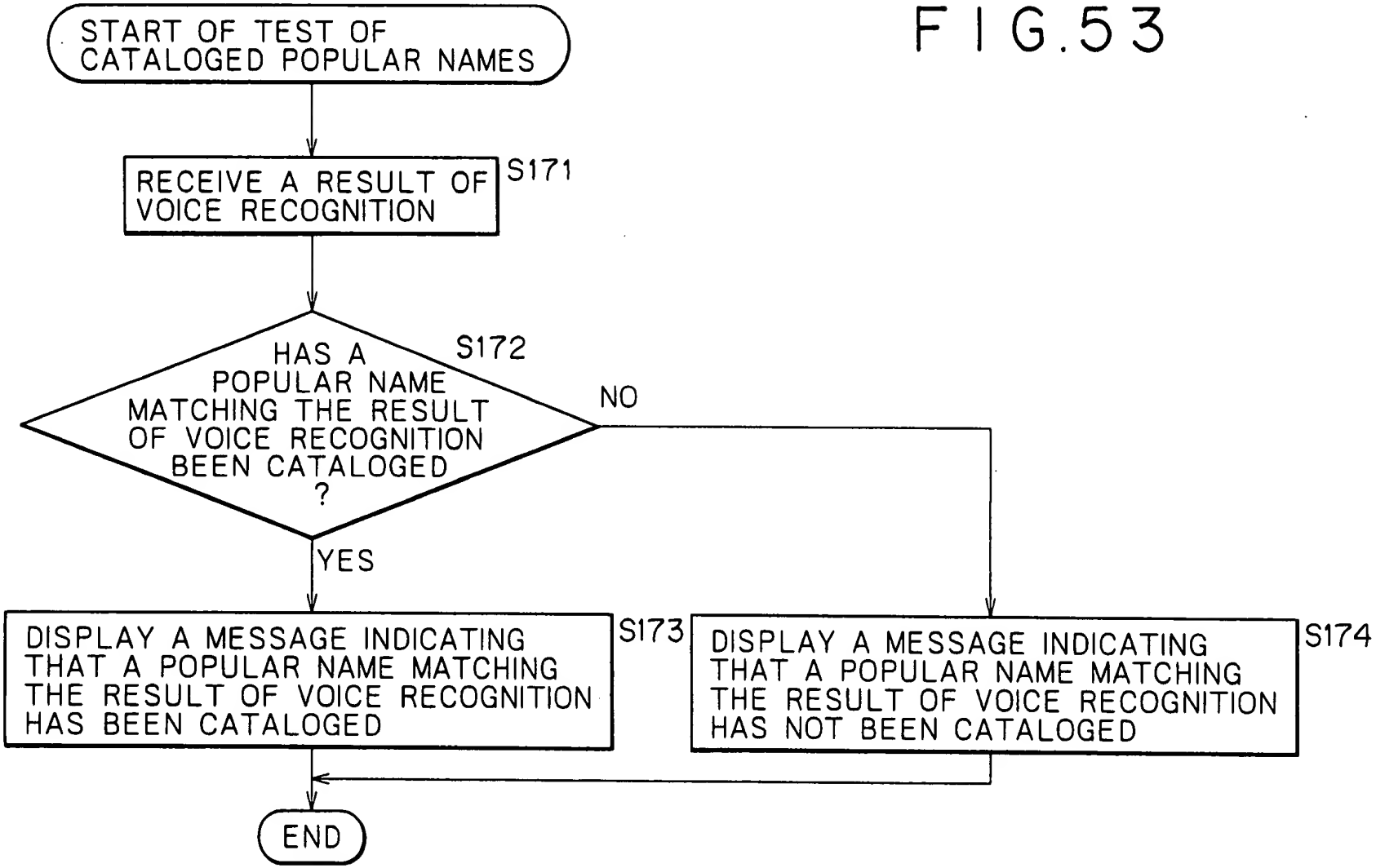
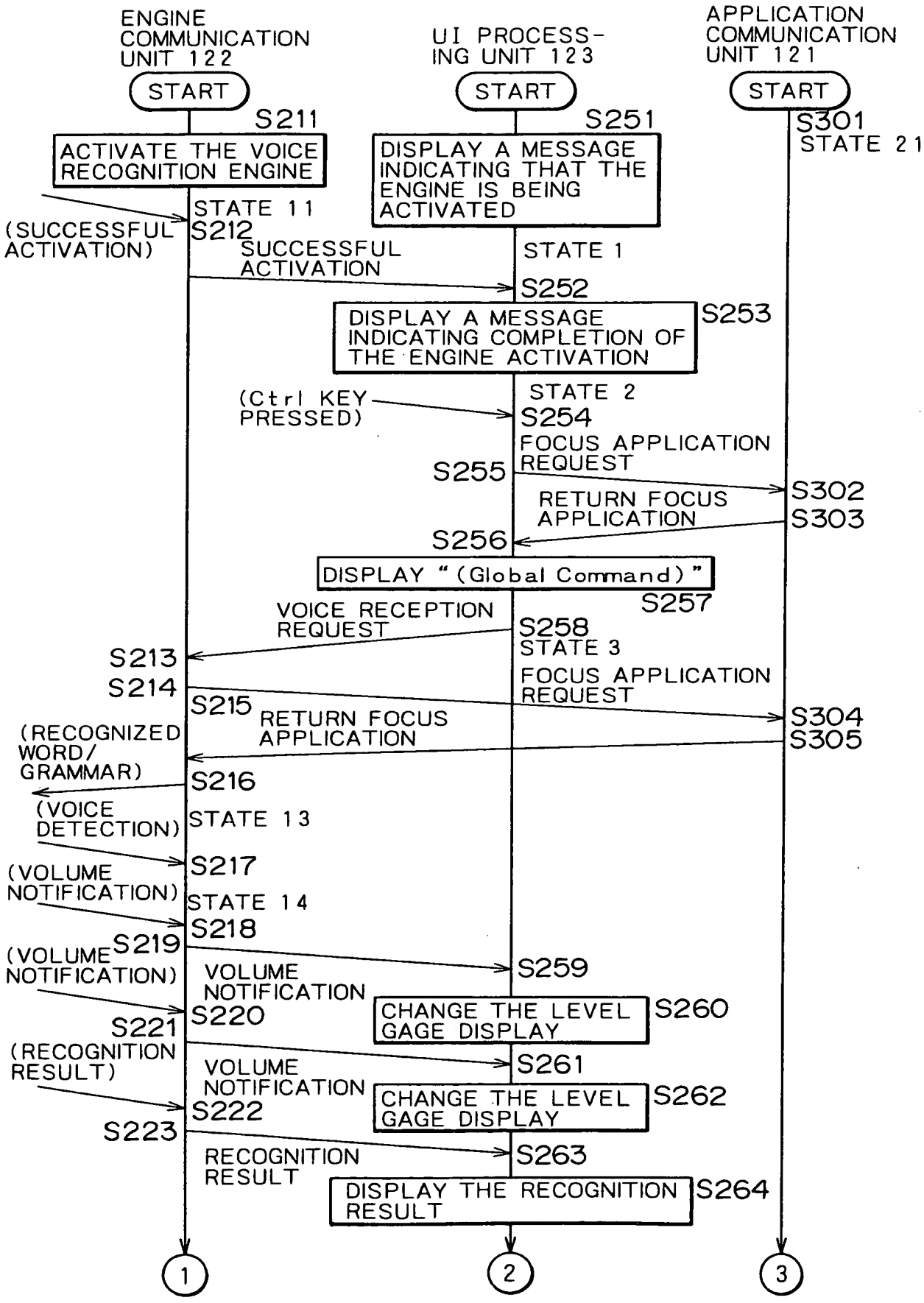
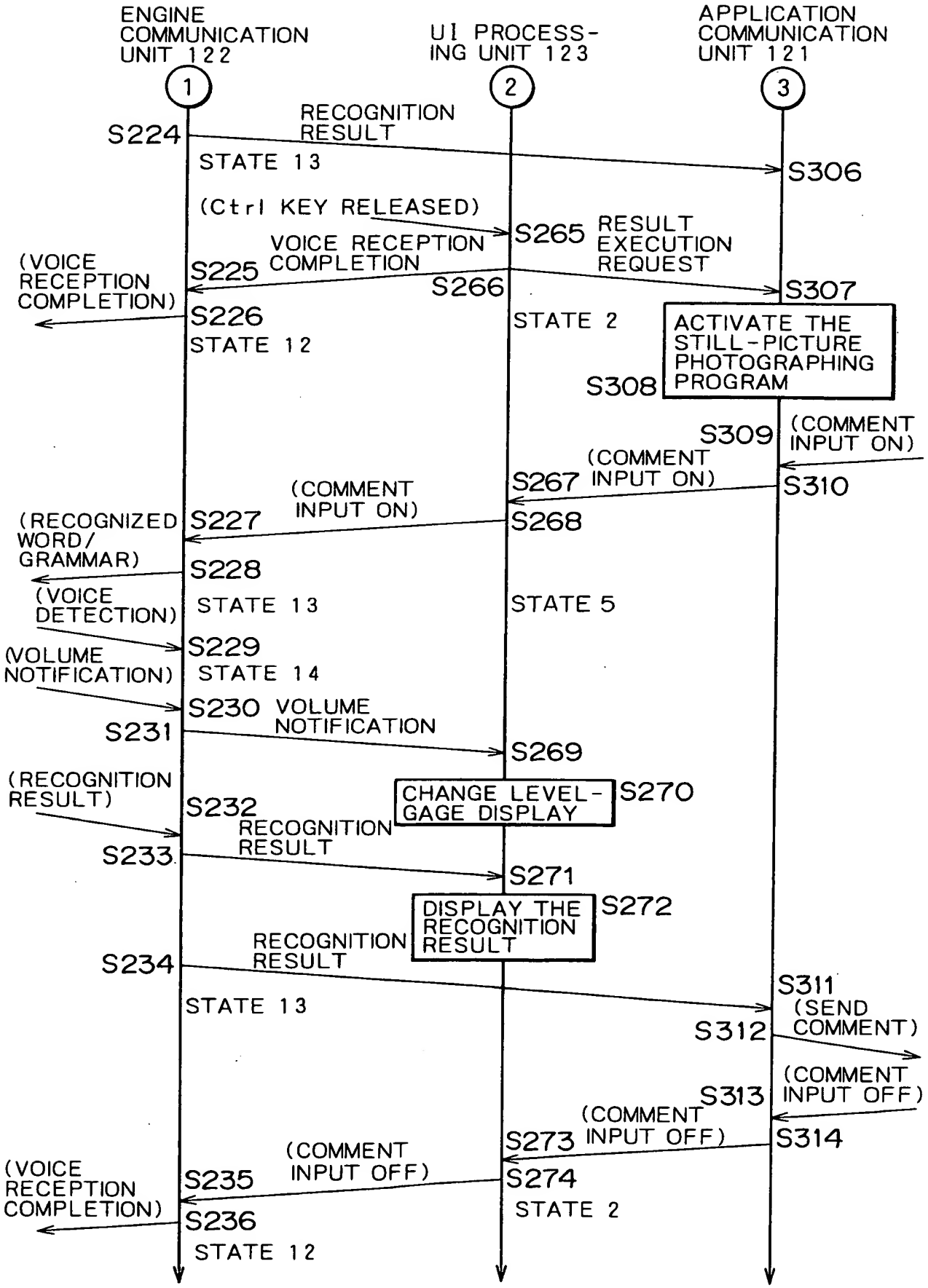

START OF TEST OF CATALOGED POPULAR NAMES
RECEIVE A RESULT OF VOICE RECOGNITION
S171
HAS A POPULAR NAME MATCHING THE RESULT OF VOICE RECOGNITION BEEN CATALOGED ?
S172
NO
YES
DISPLAY A MESSAGE INDICATING THAT A POPULAR NAME MATCHING THE RESULT OF VOICE RECOGNITION HAS BEEN CATALOGED
S173
DISPLAY A MESSAGE INDICATING THAT A POPULAR NAME MATCHING THE RESULT OF VOICE RECOGNITION HAS NOT BEEN CATALOGED
S174
END

FIG. 54



0054863.082500

FIG. 55



0095486.0025000